[illegible]

Do[illegible] P[illegible]

NESE Sec 2 T 7S R 1E

Fall River Co

Elev - 3792. Spudded 8-24-64

Geologist - [illegible]

July 8, 1964

Mud pits not dug, rig not at location

8-3-64

Drilling at 477 -- Spearfish set 1420' 8 5/8 csg

8-6-64

Drilling at 1700 in Minnelusa [illegible]

Lakota 320 Spearfish 930

Morrison - 401 Minnelusa 1472

Sundance - 600 Opeche 1505

8-13-64

Coring at 2163

8-18-64

Drilling at 2424

Well plugged
Cored 2153 - 2200 (no shows)
DST #1 1688 - 90' [illegible]
[illegible] - [illegible] 2R [illegible]
TD 2490

Tops:

[illegible] 300	[illegible] ~~804~~ 918
[illegible] - 550	[illegible] 1414
[illegible] - 400	[illegible] 1520
[illegible] 640	[illegible] 1175
[illegible] - 940	Red [illegible] - 2032
	3rd [illegible] - 2400

9 - 2 - 64

Abandonment marker placed; mud pits not filled!

9-21-64

Mud pits filled + surface restored.

WELL;- [illegible]

LOCATION;-

LOGS RECD;-
TOPS;-

GEOLOGIC;- 1 copy with Completion Report

ELECTRIC, FIELD;-
FINAL;- 2 Ind LL

RADIO, FIELD;-
FINAL;- 1 sonic GR

OTHERS;- 2 [illegible]

CUTTINGS RECD;- 2 - 9 - 65

CORES RECD;- 2 - 9 - 65

DRILL STEM DATA RECD;-

CAP PLUG CHECKED;- OK
Mud pits filled

PLUGGING AFFIDAVIT SIGNED;- 3 - 10 - 65
[illegible]
[illegible]

OPERATOR'S TECHNICAL REPORTS / MAPS

George Dolezal Jr., Sun Oil Co., et al

No. 1 Earl Darrow

Fall River County

South Dakota

Contents

SUMMARY OF WELL DATA

Operator:	George Dolezal Jr., Sun Oil Co., etal.
Lease:	No. 1 Earl Darrow
Location:	C SE SE Section 2, T. 7S. R. 1E. 660' FSL 660' FEL Fall River County, South Dakota.
Elevation:	Ground 3792' K. B. 3797'
Contractor:	Baker Drilling Company Rig No. 3 - Sullivan draw works Tool Pusher: Jim Baker Drillers: Don Garhart Ed Buchannan
Spud Date:	July 24, 1964
Completion Date:	August 19, 1964
Casing:	140' 8-5/8" used 24# @ 142' ground with 60 sacks of regular cement.
Hole Size:	11" cable tool hole to 145' 7-7/8" from 145' to total depth.
Mud:	Mo-Mar Mud Company Casper, Wyoming J. M. Bunce Engineer Gel base
Logging:	Drilling time: From surface casing to total depth (Geolograph) Schlumberger: Dual Induction-Laterlog 147' to 2442' Schlumberger: Sonic Log-Gamma Ray 147' to 2441'
Samples:	10-foot samples 140 - 2100 feet 5-foot samples 2100 - 2250 feet 10-foot samples 2250 - 2450 feet Samples on file at AmStrat in Denver.
Geology:	Well site geology by S. D. Ayres
Lost Circulation:	Lost minor amounts of mud from 1630' to total depth.

1.

SUMMARY OF WELL DATA (continued)

Total Depth:	2450' - Driller 2446' - Schlumberger
Status:	Plugged and Abandoned
Plugs:	2435' to 2360' - 25 sacks 1650' to 1575' - 25 sacks 600' to 525' - 25 sacks 400' to 325' - 25 sacks 165' to 90' - 25 sacks Dry-hole marker and 10 sacks at surface.
Drill Stem Tests:	Schlumberger Formation Tester 1688' to 1690.5' Converse sand. Tool open 30 minutes Tool shut in 23 minutes Recovered 600 cc mud Pressures 0
Cores:	Core #1-2155' to 2206'. First Leo zone (see sample desc.)

ELECTRIC LOG FORMATION TOPS

Formation	Depth	Datum
Fuson	300	+3497
Lakota	350	+3447
Morrison	425	+3372
Sundance	640	+3157
Spearfish	918	+2879
Goose Egg	1240	+2557
Minnekahta	1479	+2318
Opeche	1520	+2277
Minnelusa	1616	+2181
Red Shale Marker	2032	+1765

GEOLOGICAL SUMMARY

The subject well was drilled to a total depth of 2450 feet within a sand that would possibly coorelate with the Third Leo sandstone of the Pennsylvanian stratigraphic section in the Lance Creek field.

The Dakota sandstone between the base of the surface casing and 300 feet gave no indications of oil staining

2.

GEOLOGICAL SUMMARY (Continued)

or fluorescence.

No indications of oil and/or gas were noted in the Lakota horizon.

The Canyon Spring sandstone of the Sundance was missing.

A circulated sample of the First Converse sandstone at 1638 feet showed no oil staining. A circulated sample of a Converse sand at an electric log depth of 1690' showed no indication of oil or gas staining.

Minor amounts of lost circulation occurred from 1650'. to total depth but this did not noticeably effect the drilling or the samples.

The First Leo sandstone was cored, no effective or reservoir sands were found and no staining was noted.

No effective sands or staining was found in the Second Leo zone.

The Third Leo zone did contain some possible reservoir sands but no staining or fluorescence was noted .

Because of electric log interpretation a Schlumberger formation test was made on the Converse sand from 1688 feet to 1690.5 feet.

No shows of oil and/or gas and the lack of reservoir beds in the Leo zones led to the decision to abandon this well without further testing.

B. D. Ayres

3.

SAMPLE DESCRIPTION

Surface - Skull Creek
10-foot samples between 140 and 2100 feet.
Samples have been corrected for lag.

140	-	180	Sand, fine grained, sub-rounded, vitreous, friable, white, well sorted, good permeability and porosity. Some gray friable siltstone. No show.
180	-	200	Siltstone, medium gray, friable.
200	-	230	Shale, light to pale gray, silky, waxy, bentonitic.
230	-	250	Sand, fine to coarse grained, conglomeritic, poorly sorted in part, with white to pale green matrix, rounded to angular. No shows.
250	-	260	Shale, medium to dark gray.
260	-	300	Sand, fine grained, friable, clay-filled, white to pale green, slightly glauconitic. No shows. Traces of dark gray to red to rose to yellow silty shale.
300			TOP FUSON SHALE
300	-	330	Shale, silty, slightly conglomeritic, yellow.
330	-	350	Shale, as above, traces of sand, fine to medium grained, calcareous. Traces of good porosity. No show.
350			TOP LAKOTA
350	-	380	Sand, fine to medium grained, vitreous to frosted, slightly calcareous, pink to red. No show. Some traces of shale.
380	-	425	Sand, fine to very coarse grained, vitreous to coated, friable, clay-filled, mostly red, poorly sorted, sub-rounded, numerous free floating sand grains, conglomeritic. No shows.
425			TOP MORRISON
425	-	450	Shale, gray to green to yellow. Quit waxy, traces of gray bentonite.
450	-	460	Sand, fine grained, angular, frosted, hard, poorly sorted, tight. No show.
460	-	490	Shale, dark gray to dark green, waxy, soft.
490	-	520	Shale, green, waxy, bentonitic. Trace of pyrite. Traces of calcite crystals and white crystalline limestone.
520	-	550	Shale, green, as above. Red to maroon silty shale.
[illegible]	-	[illegible]0	

4.

SAMPLE DESCRIPTION (continued)

550	- 620	Shale, light gray to green, traces of buff to gray dense limestone. Traces of white sandy limestone.
620	- 640	Shale, medium to dark gray.
640		TOP SUNDANCE
640	- 700	Shale, light gray to green, silty. Traces of green glauconitic, fine grained, friable sandstone. No show.
700	- 750	Sand and shale, as above. Trace + of sand, fine grained, white, friable, slightly calcareous. No show.
750	- 870	Sand, fine to medium grained, vitreous to coated, friable, white to gray to pink to red, slightly calcareous, traces of good porosity. No show. Shale, gray to green to red to purple. Silty in part.
870	- 920	Shale, silty, red, gray to green. Traces of sand, as above.
918		TOP SPEARFISH
920	- 1000	Red silty shale.
1000	- 1110	Red silty shale, traces of red silty sand. No shaw.
1110	- 1240	As above. Traces of white anhydrite, buff to white limestone and calcite.
1240		TOP GOOSE EGG
1240	- 1250	Anhydrite, white.
1250	- 1280	Shale, red, very silty to sandy, very hard and brittle.
1280	- 1480	Anhydrite, white, sucrosic, interbedded with red silty shale. Traces of dolomite.
1480		TOP MINNEKAHTA
1480	- 1520	Dolomite - limestone, gray to buff to white to pink to purple. Micro-crystalline to dense, some sucrosic. No show. Good mineral fluorescence, no cut.
1520		TOP OFECHE
1520	- 1560	Shale, red to purple, silty to a sandy shale to a silty sand, fine grained, friable, coated. No show.

5.

SAMPLE DESCRIPTION (continued)

1560 - 1590	Red silty shale, as above and white sucrosic anhydrite, slightly dolomitic.
1590 - 1620	Red silty to sandy shale to a red, hard, brittle, very fine grained silty sand.
1616	TOP MINNELUSA
1620 - 1660	Sand, medium grained, rounded to sub-rounded, vitreous to frosted, friable, white to pink to red, good porosity in part, clay-filled in part, fairly well sorted. Red sand is dolomitic. Sand becomes more red at the base. No show.
1660 - 1680	Anhydrite, gray, hard, dense.
1680 - 1690	Sand, medium grained, rounded to sub-rounded. vitreous to frosted, friable, slightly dolomitic. red. Traces of good porosity. No show.
1690 - 1750	Anhydrite,, gray, hard, dense. Traces of red and gray silty shale. Traces of dolomite and sand.
1750 - 1775	Shale, red to gray, silty. Traces of sand. Traces of medium grained, well sorted, friable, clay-filled red to pink sand. No show.
1775 - 1830	Dolomite, buff to gray, fairly hard, sucrosic.
1830 - 1855	Dolomite - anhydrite, buff to gray, micro-crystalline, very hard.
1855 - 1865	Sand, medium to coarse grained, rounded to sub-rounded, vitreous to frosted, friable, poorly sorted,white, clay-filled, dolomitic, poor porosity. No show.
1865 - 1880	Dolomite, buff to gray, traces of pink.
1880 - 1905	Dolomite, buff to white, dense. Traces of sand and anhydrite.
1905 - 1915	Sand, medium grained, dolomitic and anhydritic. No show.
1915 - 1940	Anhydrite, white to buff to pink. Some gray.
1940 - 1960	Dolomite, buff to pink to red, mostly pink, hard, dense. 20% buff to red very dolomitic sand, very hard,
1960 - 2000	Dolomite, as above with increase in fairly friable sand as above. No show.
2000 - 2020	Anhydrite, white to buff to gray.
2020 - 2030	Dolomite, buff to gray to pink.

SAMPLE DESCRIPTION (continued)

2030	**TOP RED SHALE MARKER**
2030 - 2042	Shale, red to pink to yellow, fissile, metallic luster.
2042 - 2070	Dolomite, white to buff to gray to pink, hard and dense.
2070 - 2085	Dolomite, gray, very hard, micro-crystalline. Shale, very black, hard, brittle.
2085 - 2125	Dolomite, dark gray to black, some brown and tan, micro-crystalline. Chert, vitreous, angular, some smoky. Dark gray to black dolomitic shale with oily taste. No cut or fluorescence.

Five foot samples from 2100 to 2250 feet.

2125 - 2145	Dolomite, as above, with no chert. Traces of a poorly sorted dolomitic sand. No show.
2145 - 2151	Dolomite, medium to dark gray, micro-crystalline, hard, slightly anhydritic.

Core #1 2155 to 2206 feet is adjusted up four feet in depth to fit the electric log.

2151 - 2152.5	Sand, gray, fine grained, well sorted, anhydrite filled, hard, tight, no porosity. No show.
2152.5 - 2153	Sand, gray, fine grained, well sorted, trace of porosity, slightly dolomitic, No show.
2153 - 2158	Dolomite, gray, hard, dense, micro-crystalline. Slightly shaley.
2158 - 2160.5	Shale, black, carbonaceous, micaceous, hard.
2160.5 - 2167	Sand, gray to greenish gray, fine grained, anhydrite and dolomite filled, well sorted, hard, tite, no porosity. No show.
2167 - 2171	Anhydrite, gray, hard.
2171 - 2176	Shale, black, micaceous, carbonaceous, with occasional anhydrite streaks.
2176 - 2180	Shale, black, carbonaceous, micaceous, with sulfur odor.
2180 - 2188.5	Sand, gray to greenish gray, fine grained, anhydrite and dolomite filled, well sorted, hadr, tight, no porosity. No show.
2188.5-2189.5	Shale, gray, hard.

SAMPLE DESCRIPTION (continued)

2189.5 - 2194	Sand, gray to greenish gray, fine grained, anhydrite and dolomite filled, well sorted, hard, tight, no show.
2194 - 2202	Dolomite, gray to brown, anhydritic, trace of vuggy porosity.

End of core #1

2202 - 2206	Shale, black, carbonaceous, micaceous.
2206 - 2218	Dolomite, gray, dense.
2218 - 2220	Shale, black, micaceous, carbonaceous.
2220 - 2228	Dolomite, gray, dense.
2228 - 2230	Shale, black, carbonaceous, micaceous.
2230 - 2238	Dolomite, gray, dense.
2238 - 2242	Shale, black, carbonaceous, micaceous.
2242 - 2250	Sand, fine to medium grained, rounded, vitreous to frosted, hard to friable, anhydrite filled and dolomite filled, tight. No show.

Ten foot samples from 2250 to 2450 feet. Total depth.

2250 - 2268	Dolomite, gray, hard.
2268 - 2272	Black silty shale with oily taste.
2272 - 2298	Dolomite, gray, hard, traces of sand and anhydrite as above.
2298 - 2300	Black silty shale.
2300 - 2325	Dolomite, gray to dark gray, hard, dense, traces of sand as above.
2325 - 2395	Sand, fine grained, rounded, frosted, very calcareous, lime or dolomite matrix. Very dense, tight, buff to tan. No show. Traces of medium grained, rounded, frosted, friable, slightly clay-filled sandstone. Trace of porosity, white. No show.
2395 - 2400	Dolomite, gray, dense.
2400 - 2450	Sand, fine to medium grained, mostly fine, rounded, frosted, calcareous, friable. Trace to fair porosity, white to buff to gray. No show.
2450	Total Depth.

8.

Chronological History

7-24-64	Spudded 11" cable tool surface hole.
7-27-64	Set 140 feet of 8-5/8" used 24# pipe with 60 sacks of regular cement at 142 feet ground. Plug down 10:00 P.M.
7-28-64	Waiting on rotary
7-29-64	Waiting on rotary
7-30-64	Waiting on rotary
7-31-64	Moving in rotary and rigging up.
8- 1-64	Finished rigging up. Drilled out from under surface @ 6:30 P.M. Drilled to 415 feet.
8- 2-64	Drilled to 530 feet, made trip for bit #2. Drilled to 572 feet, made trip for bit #3. Drilled to 925 feet
8- 3-64	Drilled to 977 feet, made trip for bit #4. Strapped out of hole and found a 33 foot error. 977 feet equals 1010 feet. Drilled to 1217 feet, started trip for bit #5.
8- 4-64	Finished trip for bit #5. Drilled to 1341 feet. Made trip for bit #6. Drilled to 1410 feet.
8- 5-64	Drilled to 1525 feet. Made trip for bit #7. Drilled to 1590 feet.
8- 6-64	Drilled to 1622 feet. Made trip for bit #8. Drilled to 1752 feet.
8- 7-64	Drilled to 1756 feet. Made trip for bit #9. Began mudding up. Drilled to 1834. Made trip for bit #10. Drilled to 1845 feet.
8- 8-64	Drilled to 1875 feet. Made trip for bit #11. Drilled to 1933 feet.
8- 9-64	Drilled to 1942 feet. Made trip for bit #12. Drilled to 1987 feet. Started trip for bit #13.
8-10-64	Finished trip for bit #13. Drilled to 2036 feet. Made trip for bit #14. Drilled to 2075 feet.
8-11-64	Drilled to 2091 feet. Made trip for bit #15. Drilled to 2116 feet.
8-12-64	Drilled to 2125 feet. Made trip for bit #16. Drilled to 2155 feet. Came out of hole to go in with core barrel for core #1.
8-13-64	Cored from 2155 feet to 2200 feet.
8-14-64	Cored from 2200 feet to 2206 feet. Reamed core hole. Drilled to 2250 feet. Twisted off.
8-15-64	Recovered fish. Drilled to 2275 feet with bit #19.
8-16-64	Drilled to 2285 feet. Made trip for bit #20. Drilled to 2309 feet. Made trip for bit #21. Drilled to 2318 feet.

9.

CHRONOLOGICAL HISTORY (continued)

8-17-64 Drilled to 2341 feet. Made trip for bit #22. Drilled to 2400 feet.
8-18-64 Drilled to 2429 feet. Made trip for bit #23. Drilled to 2450 feet. Ran logs.
8-19-64 Ran Schlumberger Formation Test #1. P. & A.

BIT RECORD

No.	Size	Make	From	To	Footage	Hours
1	7-7/8	Retip	140	530	390	8.50
2	7-7/8	Retip	530	605	75	2.00
3	7-7/8	Retip	605	1010	405	11.25
4	7-7/8	Retip	1010	1217	207	12.50
5	7-7/8	Retip	1217	1341	124	11.50
6	7-7/8	Retip	1341	1525	184	22.00
7	7-7/8	Retip	1525	1622	97	7.50
8	7-7/8	Retip	1622	1756	134	14.00
9	7-7/8	Retip	1756	1834	78	14.00
10	7-7/8	Retip	1834	1875	41	11.50
11	7-7/8	Retip	1875	1942	67	11.50
12	7-7/8	Retip	1942	1987	45	11.50
13	7-7/8	Retip	1987	2036	49	14.50
14	7-7/8	Retip	2036	2091	55	16.00
15	7-7/8	Retip	2091	2125	34	14.00
16	7-7/8	Retip	2125	2155	30	11.50
17	7-27/32 Diam.	Christ.	2155	2206	51	24.00
18	7-7/8	Retip	2206	2250	46	14.00
19	7-7/8	Retip	2250	2285	35	12.50
20	7-7/8	Retip	2285	2309	24	8.25
21	7-7/8	Retip	2309	2341	32	10.50
22	7-7/8	Retip	2341	2429	88	17.00
23	7-7/8	Retip	2429	2450	21	2.75

DEVIATION SURVEYS

Depth	Degrees	Depth	Degrees
977	1	1834	1/2
1217	3/4	1942	3/4
1525	3/4	2125	3/4
		2341	3/4

DRILLING TIME - FIVE-FOOT INTERVALS

150	- 200	5	4	4	4	8	8	9	6	6	6
200	- 250	7	4	3	2	5	5	4	4	3	3
250	- 300	2	3	4	4	3	3	6	7	5	3
300	- 350	3	3	3	4	4	4	5	3	3	3
350	- 400	2	1	2	1	3	3	3	2	2	2
400	- 450	3	17	9	6	10	8	7	8	20	19
450	- 500	8	9	11	6	7	6	8	6	8	7
500	- 550	8	8	8	8	11	10	9	12	15	10
550	- 600	8	10	17	11	13	14	17	17	15	8
600	- 650	8	9	5	7	6	5	6	6	6	9
650	- 700	6	5	6	7	9	8	6	6	5	5
700	- 750	4	5	5	4	7	9	8	4	7	5
750	- 800	5	4	7	5	5	5	5	6	7	5
800	- 850	5	5	5	5	6	6	10	8	5	5
850	- 900	7	5	6	5	5	5	7	7	7	5
900	- 950	6	6	7	8	6	6	10	13	11	12
950	- 1000	11	16	16	16	15	13	13	15	13	15
1000	- 1050	16	16	13	17	12	16	18	15	14	15
1050	- 1100	11	12	15	16	17	10	10	11	12	12
1100	- 1150	10	12	17	19	20	22	25	18	16	18
1150	- 1200	20	20	20	23	21	23	22	25	25	18
1200	- 1250	20	23	25	21	23	19	22	23	28	30
1250	- 1300	20	20	24	21	25	26	27	28	28	20
1300	- 1350	30	35	39	28	25	38	39	40	23	22
1350	- 1400	25	31	27	28	37	22	38	30	28	40
1400	- 1450	39	35	38	33	33	37	46	38	38	34
1450	- 1500	38	38	40	38	40	45	43	38	31	27
1500	- 1550	25	30	35	30	17	16	16	16	14	13
1550	- 1600	14	18	23	18	22	24	21	22	25	27
1600	- 1650	26	30	68	53	38	15	9	9	14	15
1650	- 1700	7	10	12	15	32	25	20	18	15	18
1700	- 1750	47	44	50	50	51	60	71	70	60	60
1750	- 1800	90	18	14	18	24	26	48	40	28	28
1800	- 1850	28	50	106	110	100	99	100	49	60	95
1850	- 1900	92	100	76	66	100	40	38	40	40	42
1900	- 1950	47	43	42	50	67	78	81	93	55	35
1950	- 2000	93	103	103	85	101	75	97	75	45	85
2000	- 2050	90	90	97	98	100	120	120	43	41	44
2050	- 2100	45	73	73	70	80	108	165	120	75	70
2100	- 2150	103	136	140	160	167	80	100	137	122	100
2150	- 2200	135	Cored								
2200	- 2250	Cored		50	82	80	92	72	115	140	145
2250	- 2300	52	74	103	112	80	135	195	45	70	110
2300	- 2350	130	140	185	80	110	108	127	110	37	42
2350	- 2400	32	50	45	48	82	75	68	62	70	58
2400	- 2450	95	77	32	34	37	60	38	52	25	25

11.

CORING TIME

Minutes per foot

2155 - 2160	[illegible]					116	333	236	39	38
2160 - 2170	30	33	17	28	39	30	11	15	27	29
2170 - 2180	29	26	42	43	39	23	27	30	28	27
2180 - 2190	31	30	29	30	28	14	12	20	16	15
2190 - 2200	19	15	24	31	20	25	20	34	35	33
2200 - 2206	41	35	20	37	29	41				

12.

ADMINISTRATIVE / SUNDRY REPORTS

S. Dak. Oil & Gas Board
FORM 4

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

FARM OR LEASE NAME: Carl Arrow
WELL NO:

TYPE OF COMPLETION
☐ Oil Well ☐ Gas Well ☒ Dry Hole
☐ New Well ☐ Work-Over ☐ Deepen ☐ Plug Back ☐ Same Zone ☐ Diff Zone

FIELD AND POOL, OR WILDCAT: Wildcat

OPERATOR: George Bolezal, Jr.
NO. ACRES IN LEASE:

ADDRESS: 1121 Tower Building, Denver, Colorado 80202

LOCATION (In feet from nearest lines of section or legal subdivision where possible): Surface 660' FSL - 660' FEL
Top prod. interval
At total depth
¼ ¼ SEC. TWP. RGE: SE, SE, Sec. 2-73-44
COUNTY: Fall River

PERMIT NO.	DATE ISSUED	PREVIOUS PERMIT NO.	DATE ISSUED
361	July 1, 1964		

DATE SPUDDED	DATE T.D. REACHED	DATE COMPL. (Ready to Prod.)	ELEVATIONS (DF, RKB, RT, GR, etc.)*	ELEV. CASINGHEAD FLGE
July 24, 1964	August 19, 1964		3292' Grd. - 3297'	

TOTAL DEPTH (MD & TVD)	PLUG, BACK T.D. (MD & TVD)	IF MULTIPLE COMPL., HOW MANY*	INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
				1.5' to 2,447'	to 1.5'

PRODUCING INTERVAL(S), THIS COMPLETION, TOP, BOTTOM, NAME (MD & TVD)*: ..one

DATE DIRECTIONAL SURVEY SUBMITTED:

TYPE ELECTRIC AND OTHER LOGS RUN (Circle those filed): Gamma Ray - Sonic and Dual Induction - Laterolog

WAS WELL CORED: Yes

CASING RECORD (Report all strings set in well)

CASING SIZE	DEPTH SET (MD)	HOLE SIZE	WEIGHT LBS./FT.	PURPOSE	SACKS CEMENT	AMOUNT PULLED
8-5/8"	142'	11"	24#	Surface	60	None

LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

PERFORATION RECORD

DEPTH INTERVAL (MD)	HOLES PER FT.	SIZE AND TYPE	PURPOSE

ACID, SHOT, FRAC., CEMENT SQUEEZE, Etc.

AMOUNT AND KIND OF MATERIAL USED	DEPTH INTERVAL (MD)

PRODUCTION

DATE FIRST PRODUCTION | PRODUCING METHOD (Flowing, gas lift, pumping,—size & type of pump) | WELL STATUS (Prod. or Shut-in)

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PRODUCTION FOR TEST	OIL, Bbls.	GAS, Mcf.	WATER, Bbls. & %	OIL GRAVITY-API (Corr.)
			→				

FLOW. TUBING PRESSURE	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL, Bbls.	GAS, Mcf.	WATER, Bbls. & %	GAS-OIL RATIO
		→				

DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

LIST OF ATTACHMENTS: Two copies final well completion report by J. J. Ayres, including sample descriptions, etc.

I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED: George Bolezal, Jr. TITLE: Owner DATE: Aug. 27, 1964

DO NOT WRITE BELOW THIS LINE
*See Instructions On Reverse Side

Approved: Nov. 12, 1964
Date

OIL AND GAS BOARD OF THE STATE OF SOUTH DAKOTA

..... Secretary

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Supplemental instructions by local Federal and/or State offices will govern the use of this form.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see last blank.

If this well was directionally drilled, show both the location at the surface and at total depth from nearest lines, where possible; also show the locations at the top and at the bottom of any zone for which production data are reported in space 22, and any zone open for injection or disposal. Use this reverse side if more space is needed. (MD-Measured Depth, TVD-True Vertical Depth)

*Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

If this well is completed for separate production from more than one zone (multiple-zone completion), so state in the correct space and show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the zone reported in the blanks under PRODUCTION. Submit a separate completion report on this form for each interval (zone) to be separately produced.

"Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

File 8 copies of this form with Secretary, Oil and Gas Board, Pierre.

SUMMARY OF WATER ZONES AND NON-COMMERCIAL OIL OR GAS ZONES (Note: If well was directionally drilled, show both measured and true vertical depths for zones and markers listed)						GEOLOGIC MARKERS		
KIND OF FORMATION	DEPTH TO TOP		DEPTH TO BOTTOM		CONTENTS; PRODUCTIVE RATE, IF KNOWN	NAME	DEPTH TO TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH	MEAS. DEPTH	TRUE VERT. DEPTH			MEAS. DEPTH	TRUE VERT. DEPTH
						Dakota	120'	
						Fuson	300'	
						LaKota	350'	
						Morrison	425'	
						Sundance	640'	
						Spearfish	918'	
						Goose Egg	1240'	
						Minnekahta	1479'	
						Opeche	1520'	
						Minnelusa	1616'	
						"Red Marker"	2032'	

S. Dak. Oil & Gas Board
FORM 7

PLUGGING RECORD

Operator	Address
George Dolezal, Jr.	1121 Tower Building, Denver, Colorado

Name of Lease	Well No.	Field & Reservoir
Earl Farrow	1	Wildcat

Location of Well	Sec-Twp-Rge or Block & Survey	County
C - NE SE Section 2- ?-?E		Fall River

Application to drill this well was filed in name of	Has this well ever produced oil or gas	Character of well at completion (initial production): Oil (bbls/day)	Gas (MCF/day)	Dry
George Dolezal, Jr.	No			

Date plugged	Total depth	Amount well producing when plugged: Oil (bbls/day)	Gas (MCF/day)	Water (bbls/day)
August 19, 1964	2,447'	None	None	900

Name of each formation containing oil or gas. Indicate which formation open to wellbore at time of plugging	Fluid content of each formation	Depth interval of each formation	Size, kind & depth of plugs used. Indicate zones squeeze cemented, giving amount cement.

CASING RECORD

Size pipe	Put in well (ft.)	Pulled out (ft.)	Left in well (ft.)	Give depth and method of parting casing (shot, ripped etc.)	Packers and shoes
8-5/8"	142'	None	142'		

Was well filled with mud-laden fluid, according to regulations? Yes

Indicate if any fresh formation containing fresh water

In addition to other information required on this form, if this well was plugged back for use as a fresh water well, give all pertinent details of plugging operations to base of fresh water sand, perforated intervals to fresh water sand, name and address of surface owner, and attach letter from surface owner authorizing completion of this well as a water well and agreeing to assume full liability for any subsequent plugging which might be required.

USE REVERSE SIDE FOR ADDITIONAL DETAIL

Executed this the 27th day of August, 19 64

State of COLORADO

County of DENVER

George Dolezal, Jr.
Signature of Affiant

Before me, the undersigned authority, on this day personally appeared George Dolezal, Jr. known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on oath states, that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct.

Subscribed and sworn to before me this 27th day of August, 19 64

SEAL

My commission expires: Commission expires May 26, 1968

Notary Public in and for Denver County, State of Colorado

DO NOT WRITE BELOW THIS LINE

Approved _____ Date _____

OIL AND GAS BOARD OF THE STATE OF SOUTH DAKOTA

_____ Secretary

See Instructions On Reverse Side

Approved for release of bond
Date March 3 1965
Thomas J. McGuigan
Geologist

S. Dak. Oil & Gas Board
FORM 6

SUNDRY NOTICES AND REPORT ON WELLS

FARM OR LEASE NAME: Earl Carroll
WELL NO.: 1
FIELD AND POOL, OR WILDCAT: Wildcat
NO. ACRES IN LEASE: 640
SEC. TWP. RGE.
COUNTY

☐ OIL WELL ☐ GAS WELL ☐ ☒ DRY

OPERATOR
ADDRESS: George Bolczak, Jr.
LOCATION (In feet from nearest lines of section or legal subdivision, where possible): 1121 Lower Slbc., Denver, Colo. 80202
ELEVATIONS (DF, RKB, RT, GRD, state how determined): 600' FSL - 660' FEL
3732' Ground; 3797' K.B.
Fall River

INDICATE BELOW BY CHECK MARK NATURE OF REPORT, NOTICE OR OTHER DATA

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
TEST WATER SHUT-OFF	SHOOT OR ACIDIZE	WATER SHUT-OFF	SHOOTING OR ACIDIZING
FRACTURE TREAT	REPAIR WELL	FRACTURE TREATMENT	REPAIRING WELL
MULTIPLE COMPLETE	PULL OR ALTER CASING		ALTERING CASING
ABANDON			

(Note: Report results of multiple completion on Well Completion or Recompletion and Log Form Form 4)

DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work)

Drilled to 2,447' feet total depth in the Minnelusa formation. No shows of oil or gas were encountered. Set the following cement plugs as recommended by Mr. Earl Cox of the State Geological Survey:

25 sacks	-	2435' to 2360'
25 sacks	-	1650' to 1575'
25 sacks	-	600' to 525'
25 sacks	-	400' to 325'
25 sacks	-	165' to 90'

Dry hole marker and 10 sacks at surface.
Balance of hole filled with gel-base drilling mud.

I hereby certify that the foregoing as to any work or operation performed is a true and correct report of such work or operation

SIGNED George Bolczak, Jr. TITLE Owner DATE August 2, 1974

DO NOT WRITE BELOW THIS LINE

Approved Date

OIL AND GAS BOARD OF THE STATE OF SOUTH DAKOTA

CONDITIONS, IF ANY:

, Secretary

See Instructions On Reverse Side

$ 31.60

CORRESPONDENCE

SOUTH DAKOTA
STATE GEOLOGICAL SURVEY
SCIENCE CENTER
University of South Dakota Campus
VERMILLION 57069
Phone 624-4471

DUNCAN J. McGREGOR
Director and State Geologist
MERLIN J. TIFTON
Assistant State Geologist

FEB 19 1965

Western Field Office
Belle Fourche, South Dakota
February 18, 1965

Dr. Duncan McGregor
State Geologist
Vermillion
South Dakota

Re: Dolezal #1 Darrow
SE¼SE¼-2-7S-1E
Fall River County, South Dakota
Permit No. 361

Dear Duncan:

The six month confidential period on the above test terminates today, and all information may now be released to anyone wanting it.

The marker pipe has been placed and the mud pits satisfactorily filled and smooth. My file indicated that all required logs and records have been sent in by Mr. Dolezal.

If you have received the samples of this test, I believe the bond can be released.

Sincerely,

Earl Cox

Earl Cox
Engineering-Petroleum Geologist

EC:sn

cc: Secretary, Oil and Gas Board

February 18, 1965

Mr. Earl Cox
State Geological Survey
P. O. Box 208
Belle Fourche, South Dakota

Dear Earl:

On February 9, 1965, we received from Amstrat the following samples:

Phillips Petroleum #1-"A" Njos, Sec. 34, T. 23 N., R. 3 E., Harding County; core and intervals 50-3270, 3270-6330, 6330-9620.

✓Sun Oil et al #1 Earl Darrow, Sec. 2, T. 7 S., R. 1 E., Fall River County; core and interval 150-2450.

Consolidated Royalty #1 Wulf-Ideen-USA, Sec. 15, T. 8 S., R. 2 E., Fall River County; interval 0-2472.

Mule Creek #1-4410 Clark, Sec. 10, T. 8 S., R. 9 E., Fall River County; interval 186-2871 and 1 box cores.

Colonial Oil Co. #1 Howard Bailey, Sec. 18, T. 9 S., R. 8 E., Fall River County; interval 220-2692.

Today in the mail we received notice of shipment on February 16, 1965, of the following samples: 1 box, Consolidated Royalty Oil et al #1 Ideen-Federal, SW SW 15-9S-2E, Fall River County. We have not yet received this shipment.

Sincerely yours,

MJT

Merlin J. Tipton
Assistant State Geologist

MJT:jmd

November 13, 1964

Mr. Earl J. Cox
State Geological Survey
Box 208
Belle Fourche, South Dakota

Dear Earl:

I am enclosing a copy of the Dual Induction-Laterolog and Sonic Log-Gamma Ray for Dolosal #1 Darrow, Fall River County, Sec. 2, T. 7S, R. 1E.

Sincerely yours,

(Mrs.) Donna Jean Hedges
Administrative Assistant

For the State Geologist

Enclosures

SOUTH DAKOTA
STATE GEOLOGICAL SURVEY
SCIENCE CENTER
University of South Dakota Campus
VERMILLION 57069
Phone 624-5471

DUNCAN J. McGREGOR
Director and State Geologist
MERLIN J. TIPTON
Assistant State Geologist

Western Field Office
Belle Fourche, South Dakota
November 4, 1964

Dr. Duncan McGregor
State Geologist
Vermillion
South Dakota

Re: Dolezal #1 Darrow
SE¼ SE¼-2-7S-1E
Fall River County, South Dakota
Permit No. 361

Dear Duncan:

Enclosed for your files is one copy each of the following logs: sonic-gamma ray, dual induction-laterolog, formation tester.

Sincerely,

Earl Cox
Engineering-Petroleum Geologist

EC:cr

POWERTECH (USA) INC.

SEP 23 1964

SOUTH DAKOTA
STATE GEOLOGICAL SURVEY
SCIENCE CENTER
University of South Dakota Campus
VERMILLION 57069
Phone 624-4471

DUNCAN J. McGREGOR
Director and State Geologist
MERLIN J. TIPTON
Assistant State Geologist

Western Field Office
Belle Fourche, South Dakota
September 22, 1964

Dr. Duncan McGregor
State Geologist
Science Center
Vermillion, South Dakota

Re: Dolezal #1 Darrow
SE¼ SE¼-2-7S-1E
Fall River County
South Dakota
Permit No. 361

Dear Duncan:

The pits have been filled and the marker pipe placed at the above location.

After the samples have been received, it would seem that the bond can be released on this test.

Sincerely,

Earl Cox

Earl Cox
Engineering-Petroleum Geologist

EC:cr

Western Field Office
Belle Fourche, South Dakota
September 1, 1974

Mr. George Dolezal, Jr.
Tower Building
1700 Broadway
Denver 2, Colorado

RE: Dolezal & Darrow
SE¼ NE¼-2-7S-1E
Fall River County
South Dakota
Permit No. 361

Dear Mr. Dolezal:

I see details of the above test have been released to Rinehart's.

If information from this test is no longer confidential, I would appreciate you writing me to this effect.

Sincerely,

Earl Cox

Earl Cox
Engineering-Petroleum Geologist

EC:cr

SOUTH DAKOTA
STATE GEOLOGICAL SURVEY
SCIENCE CENTER
University of South Dakota Campus
VERMILLION 57069
Phone 624-4471

DUNCAN J. McGREGOR
Director and State Geologist
MERLIN J. TIPTON
Assistant State Geologist

Western Field Office
Belle Fourche, South Dakota
August 21, 1964

Mr. George Dolezal, Jr.
1121 Tower Building
Denver 2
Colorado

RE: Dolezal #1 Harrow
NW¼ SE¼-2-7S-1E
Fall River County
South Dakota
Permit No. 361

Dear Mr. Dolezal:

I have received from Schlumberger one copy of logs run on the above test.

We require two copies of all logs and records on oil or gas tests. Logs and records are required within 30 days of completion of the test. This letter is only to inform you of the status of our records at this time.

I appreciate the cooperation given by Mr. Ayres and hope you plan additional work in South Dakota.

Sincerely,

Earl Cox
Engineering-Petroleum Geologist

EC:cr

cc: Duncan McGregor

POWERTECH (USA) INC.

SOUTH DAKOTA
STATE GEOLOGICAL SURVEY
SCIENCE CENTER
University of South Dakota Campus
VERMILLION 57069
Phone 624-4471
Western Field Office
Belle Fourche, South Dakota

DUNCAN J. McGREGOR
Director and State Geologist
MERLIN J. TIPTON
Assistant State Geologist

August 20, 1964

Dr. Duncan McGregor
State Geologist
Vermillion
South Dakota

RE: Dolezal #1 Darrow
SE¼ SE¼-2-7S-1E
Fall River County
South Dakota
Permit No. 361

Dear Duncan:

We have been asked to keep information on this test confidential for the six months period, unless released sooner by the operator.

Sincerely,

Earl Cox

Earl Cox
Engineering-Petroleum Geologist

EC:cr

AP
POWERTECH (USA) INC.

JUL 57 8 63 1964

SOUTH DAKOTA

State Water Resources Commission

STATE OFFICE BUILDING

PIERRE, SOUTH DAKOTA

July 7, 1964

Mr. Earl Darrow
Dewey, South Dakota

Dear Sir:

I have been advised that ~~Mrx~~ George Dalezal, Jr. / 121 Tower Bldg. Denver, has obtained a Permit to Drill for Oil and Gas on your land in Section 2, T 7 S, R 1 E.

Occasionally, owners of land consider converting abandoned oil wells into water wells. Please advise me whether or not you intend to convert the oil well drill hole on your land into a water well if water is endountered and the drill hole is abandoned as an oil well.

If you are considering making a water well out of the abandoned oil well drill hole, special considerations are necessary to comply with the State's oil and water laws. The abandoned oil hole must be properly plugged and the water well properly constructed. All conversion work will be at your expense. The cost will vary, depending upon the characteristics of the drill hole, but such cost will be in the neighborhood of $5,000 or more. Usually another driller and drill rig will have to be arranged for. This other drill rig and casing and other materials will have to be on hand to take over immediately after the special oil well plugging is completed, because the drill hole cannot be left open for any appreciable length of time without spoiling it. Approval of plans for construction of the water well will be required, and a bond covering proper constructin may be required. Also, a water right may be required. All of these arrangements take considerable time to accomplish.

Please advise me immediately if you plan to convert the oil well drill hole into a water well. We both hope that a producing oil well results from the drill hole on your land; however, if not and you are planning on a water well, we must start making arrangements now.

Sincerely,

J.W. GRIMES
Chief Engineer

JWG/bw
cc State Geologist
Oil & Gas Board

Powertech (USA) Inc.

SOUTH DAKOTA
STATE GEOLOGICAL SURVEY
SCIENCE CENTER
University of South Dakota Campus
VERMILLION 57069
Phone 624-4471

DUNCAN J. McGREGOR
Director and State Geologist
MERLIN J. TIPTON
Assistant State Geologist

Western Field Office
Belle Fourche, South Dakota
July 6, 1961

Mr. George Dolezal, Jr.
1121 Tower Building
Denver 2, Colorado

RE: Dolezal #1 Darrow
SE¼ SE¼-2-7S-1E
Fall River County, South Dakota
Permit No. 361

Dear Mr. Dolezal:

The Secretary of the Oil and Gas Board has forwarded me a copy of your approved permit to drill a test. This will be an interesting test and we will watch it with interest.

During the drilling of oil tests in the State, I scout them periodically. Our Rules require the use of a blow-out preventer, on wildcat tests as spelled out in Paragraph 2, Section A, Page 10, of the Rules and Regulations which states:

> "In all unproven areas, (wildcat wells) all drilling wells shall be equipped with a mastergate, or its equivalent, an adequate blow-out preventer, together with a flow line valve of the proper size and working pressure. The entire control equipment shall be in good working condition at all times."

It is a pleasure to welcome you to South Dakota and wish you success in your test.

Sincerely,

Earl Cox

Earl Cox
Engineering-Petroleum Geologist

EC:cr

cc: Secretary Oil and Gas Board
State Geologist

SURETY

NO SURETY INFORMATION FOR THIS WELL AS OF 5/18/2011

MISCELLANEOUS

Buffalo Times Herald

August 13, 1964

8-13-64

STATE OIL DRILLING ACTIVITY ON INCREASE

Oil well drilling activity in South Dakota is expected to increase with the granting last week of four permits. Dr. Duncan McGregor, State Geologist, reports that the Oil and Gas Board has granted permits to the Consolidated Royalty Company, Casper, Woming, for two tests in Fall River county. One test, the No. 1 Ideen-Federal, is three miles southwest of Edgmont on the H. C. Porter ranch. The test will reach an estimated depth of 3300 feet and test the Leo sands of the Minnelusa Formation. The other permit to Consolidated is located eight miles southeast of Edgemont on the Kenneth Helsel ranch, and will also test the Leo sands.

Drilling continues on the Dolezal No. 1 Darrow test, and had reached a depth of 1700 feet on August 6. The test is located fourteen miles northwest of Edgemont.

Gulf Oil has been granted two permits. One location is nine miles southeast of Murdo, on the Don Hight ranch. The other is twelve miles south of Murdo on the Russell Olson ranch. On August 10 the Olson test was in the process of being drilled, but no further information was being released at that time.

Buffalo Times Herald

I VOICE

AMERICAN STRATIGRAPHIC COMPANY

1820 BROADWAY, DENVER · 524 E. YELLOWSTONE, CASPER · 17 NO. 31st ST. BILLINGS

February 1, 1965

NC 1786

South Dakota State Geological Survey
Attn: Dr. Duncan McGregor
Science Center
University of South Dakota
Vermillion, South Dakota

P. O. NO.

SOUTH DAKOTA WELLS N/C

3 Boxes	Phillips #1-A Njos, 34-23N-3E, Harding Co.	
1 Box	Sun Oil et al, #1 Earl Darrow, 2-7S-1E, Fall River Co.	
1 Box	Consolidated Royalty #1 Wolf-Ideen-USA, 15-8S-2E, Fall River Co.	N/C
1 Box	Mule Creek #1-4410 Clark, 10-8S-9E, Fall River Co.	
1 Box	Colonial Oil Co., #1 Howard Bailey, 18-9S-6E, Fall River Co.	

Shipped by:
United Buckingham

2-9-65

Department of Environment & Natural Resources ...Today

Oil and Gas Search for: *api_no_ like '40 047 05147'*		
Page 1 of 1	***Download Database*** (Excel spreadsheet format)	**Page:** 1

Record 1 of 1

Well Information

API No:	40 047 05147	**County:**	FALL RIVER
Well Name:	CONROY 1 PETERSON	**Location:**	NWSE 22-7S-1E
Permit No:	408	**Total Depth:**	2400
Operator Name:	CONSOLIDATED ROYALTY OIL CO	**Bottom Hole:**	Minnelusa
Permit Date:	11-22-1965	**KB Elevation:**	3533
Spud Date:	12-11-1965	**Ground Elevation:**	3522
Plug Date:	12-24-1965	**Latitude:**	43.429674
		Longitude:	-103.983142
Well Field	WILDCAT	**Status**	P&A
Class:	DRY HOLE	**Type:**	DRY HOLE

Formation Tops

Formation	Depth (ft.)
Minnekahta	**1610**
Minnelusa	**1690**
Converse	**1741**
Red Marker	**2158**
2nd Leo	**2290**

Page 1 of 1 (goto top)	**Page:** 1

COUNTY:	**FALL RIVER**
LEGAL LOCATION:	**NWSE 22-7N-1E**
API NO:	**40 047 05147**
PERMIT NO:	**408**
WELL NAME:	**CONROY #1 PETERSON**
OPERATOR:	**THE CONSOLIDATED ROYALTY OIL COMPANY**
PERMIT ISSUED:	**11/22/1965**
PERMIT CLOSED:	**06/14/1966**
FILE LOCATION:	**7N-1E-22 NWSE**

TARGET CODES:

WELL HISTORY / CHECKLIST

PERMIT TO DRILL / INTENT TO DRILL

WELL INSPECTION / SCOUT REPORTS

OPERATOR'S TECHNICAL REPORTS / MAPS

ADMINISTRATIVE / SUNDRY REPORTS

CORRESPONDENCE

SURETY

MISCELLANEOUS

WELL HISTORY / CHECKLIST

WELL HISTORY

Well Name Conroy #1 Peterson Permit No. 408

Location NWSE 22-7S-1E Fall River Date of Permit 11-22-65

Elev. 3522 Gr. API No. _____

Confidential _____ From _____ To _____

Logs Received _____

Cuttings Received _____ Cores Received _____

Drill Stem Records _____

Cap Plug and Marker Set 12-28-65

Surface Restored 12-28-65

Plugging Affidavit Signed _____ Date _____

Bond Released _____ Date 6-14-66

Summary of Scout Reports

12-16-65 First visit Spudded 12-11-65

12-24-65 Plugged

12-28-65 Marker in place - pits filled and location smoothed

PERMIT TO DRILL / INTENT TO DRILL

State Pub. Co., Pierre — **APPLICATION FOR PERMIT TO:** — S. Dak. Oil & Gas Board FORM 2

☒ DRILL ☐ DEEPEN ☐ PLUG BACK ☐ SINGLE ZONE ☐ MULTIPLE ZONE

☐ OIL WELL ☐ GAS WELL

FARM OR LEASE NAME: F. A. Peterson

WELL NO.: No. 1

OPERATOR: THE CONSOLIDATED ROYALTY OIL COMPANY

FIELD AND POOL, OR WILDCAT: Wildcat

ADDRESS: P. O. Box 605, Casper, Wyoming 82602

NO. ACRES IN LEASE: 1840 acres

LOCATION (in feet from an established corner of the legal subdivision): 1980' from East Line and 1980' from South Line of Section 22, Township 7 South, Range 1 East, B.H.M.

¼ ¼ SEC. TWP. RGE: C NW¼SE¼ Section 22-7S-1E

COUNTY: Fall River

NAME AND ADDRESS OF SURFACE OWNER: Francis A. Peterson, P. O. Box 5, Burdock, South Dakota

ELEVATION: 3522'

PROPOSED DEPTH: 2600'

NO. OF WELLS ETC: One (1)

ROTARY OR CABLE TOOLS: Rotary

APPROXIMATE DATE WORK WILL START: November 15, 1965

NAME AND ADDRESS OF CONTRACTOR: Bullock and Barnhart, P. O. Box 2426, Casper, Wyoming 82602

IF LEASE PURCHASED WITH ANY WELLS DRILLED, FROM WHOM PURCHASED (Name and address): None

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	NEW OR SECOND HAND	DEPTH	SACKS OF CEMENT
12-1/4"	8-5/8"	24 lb.	New	1050'	750

We plan to set surface casing in Spearfish formation to shut off anticipated water flows from the Dakota and Sundance formations.

DESCRIBE PROPOSED OPERATIONS. IF PROPOSAL IS TO DEEPEN OF PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOW OUT PREVENTER PROGRAM IF ANY

Blow Out Preventer: Schaffer 12" Series 900 Mechanical doublegate.

A 7-7/8" hole will be drilled from the base of the surface casing to total depth. In the event oil or gas production is indicated, either 4-1/2" or 5-1/2" casing will be set through the productive zone or zones and cemented with an appropriate amount of cement. In the event this test is abandoned then the hole will be plugged in accordance with the Regulations of the State Oil and Gas Board.

Anticipated Formation Tops: Dakota 205'; Lakota 398'; Sundance 687'; Basal Sundance 996'; Goose Egg 1295'; Minnekahta 1537'; Opeche 1578'; Minnelusa 1615'; Converse Anhydrite 1742'; Red Marcker 2130'; 2nd Leo 2255'.

SIGNED: [signature] TITLE: President DATE: November 17, 1965

DO NOT WRITE BELOW THIS LINE

PERMIT NO.

CHECKED BY: [signature] School and Public Lands Date 11/19/65

APPROVAL DATE

Ann Hackworth, Assistant Secretary

CONDITIONS

☒ COMPLETE SET OF SAMPLES, AND CORES IF TAKEN, MUST BE SUBMITTED.

☐ SAMPLES, AND CORES IF TAKEN, BELOW DEPTH, MUST BE SUBMITTED.

INSTRUCTIONS

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

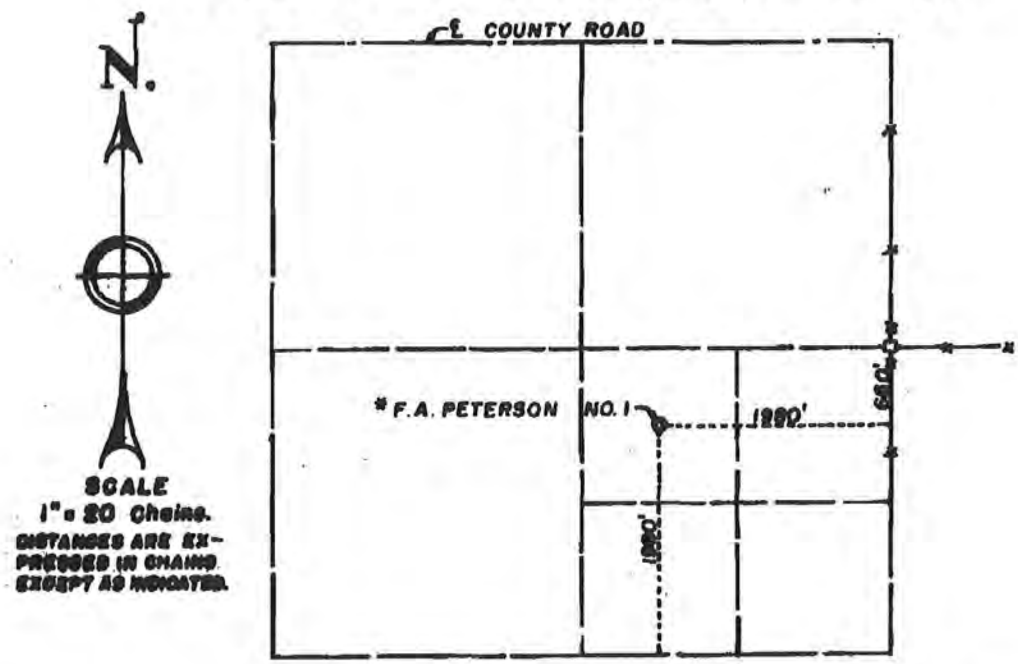
If this proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate modifications.

If the well is to be, or has been, directionally drilled, so state and show by attached sheets, if necessary, the coordinate location of the hole in any present or objective productive zones.

File 3 copies of this form with Secretary, Oil & Gas Board, Pierre.

(*Sample location: 600" South and 600" East of the Northwest Corner of Section 16.)

SECTION 22
T.7 S.-R.1 E., BLACK HILLS MER.
FALL RIVER COUNTY, SOUTH DAKOTA



LEGEND

U.S. Government Brass Cap Corner.................
Original stone corner, properly marked, firmly set.....
Iron pipe set at proportionate distance.............
Corner established by others as indicated...........
Dependent Resurvey.................................
Protraction..
Well location...

ELEVATIONS:
Before grading

LOCATION	3522
R.P. 100' N.	3521
R.P. 100' S.	3522
R.P. 100' E.	3522
R.P. 100' W.	3522

ELEV'S. REFERRED TO:
U.S.G.S. BM TT I WBR 1949
Elev. 3563

SURVEY AND PLAT BY
WORTHINGTON, LENHART & ASSOCIATES, INC.
200 South Lowell St., Casper, Wyoming
Direct solar lines and chained distances. Ref. Book No. 226, R68

PLATTED FIELD NOTES OF SURVEY
MARKING WELL LOCATION
NW¼ SE¼, SECTION 22
FOR
CON ROY - SUN - FROST, CASPER, WYOMING

[redacted] 10-28-1965
[redacted] No. 10-28-AG

* Revised 11-4-'65 JWG

Certified true and correct [illegible]
SOUTH DAKOTA REG. NO. 1836 L.S.

WELL INSPECTION / SCOUT REPORTS

Permit No. 408

STATE GEOLOGICAL SURVEY

Scout Report

Date Scouted 12-28-65

Owner ConRoy

Designation of well #1 Peterson

Location: Sec. 22 T. 7 N. S. R. 1 E.W.

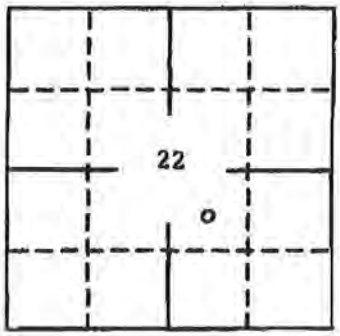
Fall River County, S. D. Total depth 2400 feet

Casing Record:

14 30 Ft. _____ Ft.

8 5/8 1125 Ft. _____ Ft.

Work in progress at time of visit:
None.



Developments since last visit:

Abandonment marker in place. Pits filled and location smoothed.

Remarks and recommendations:

Rig stacked at location.

Scouted by Earl Cox, Geologist

Approved by Duncan J. McGregor
Duncan J. McGregor, State Geologist

Permit No. 408

STATE GEOLOGICAL SURVEY

Scout Report

Date Scouted 12-24-65

Owner ConRoy

Designation of well #1 Peterson

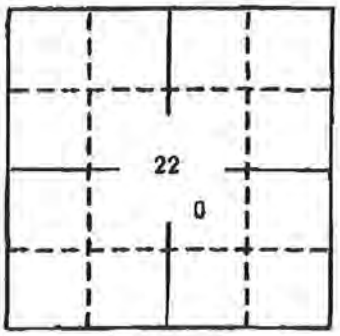
Location: Sec. 22 T. 7 N. S. R. 1 E.W.

Fall River County, S. D. Total depth 2400 feet

Casing Record:

14 30 Ft. _____ Ft.

8 5/8 1125 Ft. _____ Ft.



Work in progress at time of visit:
Plugged as follows:
1925 - 1850 25 sacks 3rd Converse
1195 - 1120 25 sacks Base Surface casing.

Developments since last visit:

Run Dual Induction and Sonic Gamma Ray log
AmStrat will process samples
No cores taken, no shows observed, no tests run.

Remarks and recommendations:

Sample tops:
Minnekahta - 1610
Minnelusa - 1690
2nd Converse - 1741
3rd Converse - 1871
4th Converse - 2020
Red Marker - 2158
2nd Leo - 2290 (tite - no shows)

Scouted by Earl Cox, Geologist

Approved by Duncan J. McGregor
Duncan J. McGregor, State Geologist

First Report

Permit No. 408

STATE GEOLOGICAL SURVEY

Scout Report

Date Scouted 12-16-65

Owner ConRoy

Designation of well #1 Peterson

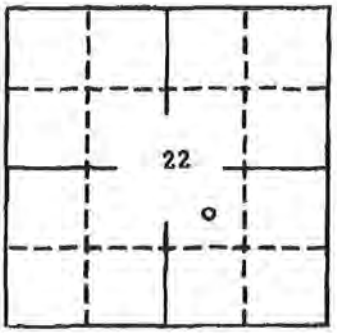
Location: Sec. 22 T. 7 N. S. R. 1 E.W.

Fall River County, S. D. Total depth 1140 feet

Casing Record:

14" 30 Ft. _____ Ft.

8 5/8 1125 Ft. _____ Ft.



Work in progress at time of visit:
Had just finished cementing surface casing.

Developments since last visit:
Spudded: 12-11-65
Set 30 feet of 14" conductor pipe with 11 sacks.
Set 1125 feet of 8 5/8 surface casing at 1136 with 850 sacks.
Slight flow from basal Sundance that was controlled with heavy mud.

Remarks and recommendations: Sample tops:

Dakota	260
Lakota	460
Morrison	560
Sundance	750
Spearfish	1122

Elevation: 3522 gd.
3533 K. B.

Scouted by Earl Cox, Geologist

Approved by Duncan J. McGregor
Duncan J. McGregor, State Geologist

API ID 40 047 05143

Conley #1 Peterson

1980 FEL, 1980 FSL.
NWSE - 22-7S-1E
Fall River.

Bullock & Barnhart
Casper.

Francis A Peterson
Burdock, S.Dak.

Elev: 3522 gd.
3533 K.B.

Est T.D 2600
(1050' surface)

Permit: 11-22-65 # 408

Slight flow Good Sandstone.
Has an estimated 500 gal in [illegible].

12-23-65
Casper Called 6:00 P.M. Ready to log & then plug. Peterson wants Surface ply left off for possible use as a water well. Ed Rorke said would cement Marker on but not Cement.

12-24-65
plugged.
1925-1850 25 sx 3rd Canu.
1175-1120 25 sx Base

Sample tops:
mk 1610
ml 1650
2nd Canu. 1741
3rd Canu. 1871
4th Canu. 2020
Red Mkr. - 2158
Inyan Kara 2290 tite-no shows
T.D. 2400 logger

12-16-65

Spud: 12-11-65

~~Drilled~~

Set 14" Conductor at 30' & Cemented with 11 sx.

Drilled 13¾' hole to 1140'

Sample tops:
Dak 260
Fal 460
Mow 560
Sun 750
Top Sp 1122

Run 1125.36' 8⅝ 24#
Set @ 1136.36' w/ 850 sx
Good Returns.
WOC 12:30 12-16-65

no Cores, test or shows

Run fast induction &
Sonic Gamma Ray Caliper

Am Strat will process samples

12-28-65
Marker in OK. Pits filled & Location to spotted.
Rig Stated at location

3-9-66
Vermillion Kind Sample

API ID 40 047 05147 ~~213~~ # 405

Con-Roy #1 Peterson

C NW¼ SE¼ sec. 22, T 7S., R 1E
Fall River Co.

Spudded 12-11-65
Elev 3522 gd
Geol.
Contractor

12-16-65
Set 30' of 14" csg & 1125' of 8⅝ @ 1136 ft. Slight flow from base of Sundance controlled with mud.
Tops: Kd 200, Kl 460, Morrison 500, Sundance 950, Spearfish 1122,

12-24-65
Drilled to 2400 & plugged. Red Sand Sh & lime - RR. Am. that will process samples. No cores, tests or shows. Tops: Minnelusa 1610, Minnelusa 1690, 2nd Con. 1791, 3rd Con. 1811, 4th Con. 2000, RM 2158, 2nd [illegible] 2290

12-27-05

Letter from [illegible] to [illegible] saying need request in writing to [illegible] surface marker [illegible]

12-28-05

Marker in place. Pete filled & smoothed Rig stacked

POWERTECH (USA) INC.

WELL: API ID 40 047 05147 Con-Roy #1 - Nelson 15 0146

LOCATION:

LOGS RECD:

TOPS:

GEOLOGIC:

ELECTRIC, FIELD:
FINAL:
1 Lead LL-22 (RMU ...)

RADIO: FIELD:
FINAL:
1 Lome GR (RMU ...)

OTHERS:

CUTTINGS RECD: 3-9-66

CORES RECD:

DRILL STEM DATA RECD:

CAP PLUG CHECKED: OK 12-28-65

SURP PITS FILLED: OK 11-29-65

PLUGGING AFFIDAVIT SIGNED:

BOND RELEASED: 6-14-66

OPERATOR'S TECHNICAL REPORTS / MAPS

CONTENTS

ConRoy #1 F. A. Peterson
C NE SE 22 T7S R1E
Fall River Co., South Dakota

SUMMARY

Operator: The Consolidated Royalty Oil Company

Name: #1 F. A. Peterson

Location: C NE SE Sec 22, Twp 7 South, Rge 1 East, Fall River County, South Dakota

Elevation: 3522 GR., 3533 K.B.

Spud: December 10, 1965 **Complete:** December 24, 1965

Status: Plugged and abandoned

Geologic Record:

Formation	Spl. Top	Schl. Top	Datum
Dakota	260	260	+3273
Fuson	380	383	+3150
Lakota	460	458	+3075
Morrison	520	524	+3009
Sundance	740 ?	753	+2780
Canyon Springs	1110	1106	+2427
Spearfish	1120	1120	+2413
Goose Egg	1420	1371	+2162
Minnekahta	1600	1613	+1920
Opeche	1650	1648	+1885
Minnelusa	1690	1685	+1848
2nd Converse SS	1740	1741	+1792
Converse Anhy	1810	1821	+1712
3rd Converse SS	1870	1870	+1663
4th Converse SS	2020	2024	+1509
Red Marker	2160	2166	+1367
2nd Leo SS	2290	2295	+1238
Total Depth:	2400	2400	

Formation Tests: None

Cores: None

Logs: By Schlumberger, Newcastle, Wyoming

Sonic & Cal	5"(1')	1136-2393
Gamma Ray	5"	300-2393
Dual Ind - LL	2"	1136-2394
	5"	1136-2394

ConRoy #1 F. A. Peterson
C NE SE 22 T7S R1E
Fall River Co., South Dakota

SUMMARY (Cont'd.)

Drilling Mud:	Mo-Mar Mud Company, Casper, Wyoming
Drilling Contractor:	Barnhart & Bullock Drilling Company, Casper, Wyoming
Geologic Supervision:	James D. Copen, Consulting Geologist, Casper, Wyoming

ConRoy #1 F. A. Peterson
C NE SE 22 T7S R1E
Fall River Co., South Dakota

GEOLOGIC RECORD

Remarks

The test was proposed primarily to investigate a permeability pinch-out of the Second Leo Sandstone member of the Minnelusa. The test was located approximately midway between a down-dip dry hole having 40 feet of permeable sandstone which was wet with a show of oil and two up-dip dry holes, both of which had no permeable sand. One of the up-dip tests had good oil staining in the Second Leo. Secondary objectives were the Canyon Springs member of the Sundance and the several Converse sands of the upper Minnelusa. The test was proposed to drill to a total depth of 2500 feet; or 300 feet below the Red Marker.

In drilling, a normal sequence of formations was encountered. The Second Leo was found to be thin, dolomitic, tight and had no shows. The various Converse sandstones were found to be nicely developed but had no shows. There were no cores or formation tests.

The test was plugged and abandoned at a depth of 2400 feet; approximately 240 feet below the Red Marker.

Sample Description

Samples from the surface hole (0-1140') are generally poor to useless, being predominently material which was recirculated by the very heavy drilling mud used to control water flows. Samples were caught both from the pilot hole and while reaming. The descriptions below are partly of each, depending on which seemed the most representative. Samples from 1140 to total depth were of uniformly good quality. Sample intervals are 10 feet with the exceptions noted below. The samples are in possession of the American Stratigraphic Company, Billings, Montana.

20' Samples

100-260 Sh - drk gry to blk, fisl; occas silt strk; Pyr

DAKOTA 260

260-300 SS - gry partly mottled blk, wh, fmg, v/firm w/poor to no porosity, occas blk sh prtg, NS; Pyr

Begin 10' Samples

300-310 Sh - gry to brn-blk, partly mottled w/blk carb material;
SS - as abv grdg to Siltst; Pyr

GEOLOGIC RECORD (Cont'd.)

310-340	SS - wh to lt gry mottled and banded w/blk, fg, vht, NS; little Sh - a/a; Pyr
340-360	SS - a/a grdg to v/argill Siltst; little Sh - v/lt gry, wxy to silty; few Siderite pellets; Pyr
360-370	Same a/a w/free Sd - fmg, NS
370-380	Same a/a w/abun free Sd; little SS - clr, fmg, v/fri, ex porosity, NS; Pyr

FUSON 380

380-420	Sh - lt gry, wh, pale lvndr, wxy; decr SS - a/a
420-430	Sh - v/drk gry w/brn cast, wxy
430-440	Sh - a/a; Sh - wh, pale grn, wxy
440-460	Sh - pale grn to wh, v/sdy, wxy; little Sd - free; Sh a/a

LAKOTA 460

460-480	Sd - free, fcg, poor sorting; NS; Sh - a/a; Pyr
480-500	Same a/a; little Sh - pale grn, sdy grading to SS-pale grn, v/argill, NS; Pyr

Begin 20' Samples

500-520	SS - fmg, fri, porous, NS; SS - wh, pale grn, v/argill; abun free Sd; Sh - brite grn, wh, gry, blk, sdy; entire spl balled-up w/gry Bent

MORRISON 520

520-560	Sh - blu-grn to brn-gry, wxy; little SS - clr, mcg, v/fri & porous, NS; abun free sd
560-580	Siltst - dead wh w/thin even bands of blk carb Sh; Sh - blk, silty; Ls - drk gry, dns; abun Pyr
580-600	Same a/a; Sd - free, mvcg, ang to rd, NS; Pyr
600-660	SS - gry, vf-vcg, v/Pyrtc, fri, argill, poor porosity, NS; Sh - a/a; abun free Sd
660-910	Samples this interval were composed 100% of recirculated material, one fragment of grn, glauc siltstone observed in 740-760 sample is thought to be near the top of the Sundance

Resume 10' Samples

910-920	Mostly recirc material; Siltst - red-brn, v/argill & soft
920-980	SS & Siltst - red-brn to wh, fcg, partly w/ex porosity, NS
980-1040	SS - lt gry-grn, fmg, partly w/ex porosity, NS; Sh - blu-gry, wxy

GEOLOGIC RECORD (Cont'd.)

1040-1090 Sh - blu-gry, wxy, blocky; little SS a/a
1090-1110 Poor samples, apparently same a/a

CANYON SPRINGS 1110

1110-1120 Poor spl; abun free sd - fvcg, clr qtz, lrg frns are well rdd, NS

SPEARFISH 1120

1120-1140 Same a/a; increasing SS & Siltst - red-brn, vfg, argill, tite
1140-1150 No sample
1150-1160 Same a/a w/occas Anhy

Begin 20' Samples

1160-1180 Same a/a
1180-1420 Siltst - red-brn a/a grading to Sh of same clr; occas Anhy

GOOSE EGG 1420

1420-1580 Anhy - wh, buff, dns to xln; Siltst & Sh - red-brn
1580-1600 Siltst & Sh - red-brn w/little Anhy

MINNEKAHTA 1600

1600-1640 Ls - wh, pnk, viol, dns; abun Anhy & Sh a/a

Resume 10' Samples

1640-1650 Same a/a

OPECHE 1650

1650-1690 Sh - brite red-brn, earthy; little Ls & Anhy a/a

MINNELUSA 1690

1690-1700 Sh - brite red-brn a/a, partly sdy; Dolo - red-brn, dns; Anhy - wh, xln
1700-1720 Sh - red-brn a/a, bcmg silty; abun Anhy - wh
1720-1740 Silt & Sh a/a becoming sdy, no porosity, NS; abun Anhy

GEOLOGIC RECORD (Cont'd.)

SECOND CONVERSE SANDSTONE 1740

1740-1746	SS - wh, tan, orng, fmg, argill, tite w/rare porosity, NS; Sh & Anhy a/a
Circ 1746	Same a/a, NS
1746-1760	Same a/a, NS
1760-1790	SS - wh, pnk, orng, mcg, ex porosity in part, NS; little Sh & Anhy a/a
1790-1810	SS - a/a to viol, mg, argill & tite, NS; Sh & Anhy a/a

CONVERSE ANHYDRITE 1810

1810-1840	Anhy - wh, buff, dns, xln; Dolo - pnk, viol; Sh - brite red w/occas grn mottling; diminishing SS a/a
1840-1870	Dolo - gry, viol, dns, gran; Anhy & Sh a/a

THIRD CONVERSE SANDSTONE 1870

1870-1876	SS - wh to orng, mg, partly argill, v/fri, fair porosity, NS; Sh, Anhy & Dolo a/a
Circ 1876	Same a/a, NS
1876-1890	SS - same a/a to red, fmg, v/argill & tite; NS; Sh, Anhy & Dolo a/a
1890-1900	Same a/a w/decr SS
1900-1940	Dolo - tan, wh, gry mottled blk, dns to gran; little SS, Sh & Anhy a/a
1940-1970	Dolo - a/a w/abun smoky cht; little Anhy & Sh a/a
1970-1980	Dolo - a/a to tan, brn; abun Anhy
1980-2000	SS - wh, mg, dolotc, hd & tite, NS; Dolo - a/a to wh, pnk; abun Anhy
2000-2020	Dolo & Anhy a/a

FOURTH CONVERSE SANDSTONE 2020

2020-2030	SS - clr, mg, fri, porous, NS; Dolo & Anhy a/a
Circ 2035	SS - wh, mg, fri, porous, abun free Sd, NS; Sh, Dolo & Anhy a/a
2035-2040	Same a/a
2040-2060	Anhy - wh to brn, dns to xln; little Dolo - tan, pnk; diminishing SS a/a
2060-2070	Same a/a w/abun free Sd - mcg, NS
2070-2100	Dolo - tan, pnk, viol, dns, gran; little Anhy, Sh & SS a/a
2100-2110	Anhy - wh, dns, xln; Dolo - tan, pnk; abun Sh - red
2110-2120	Dolo - wh mottled viol, dns; little Anhy & Sh a/a
2120-2130	Same a/a w/free Sd
2130-2160	Same as 2110-20 w/little SS - wh to lvndr, fg, poor porosity, NS

ConRoy #1 F. A. Peterson
C NE SE 22 T7S R1E
Fall River Co., South Dakota

GEOLOGIC RECORD (Cont'd.)

RED MARKER 2160

2160-2170	Same a/a w/little "Red Marker" Sh - red, lvndr, splntry, sub-metallic, specular sheen
2170-2180	Abun "Red Marker" Sh w/Dolo, Anhy & SS a/a
2180-2190	Dolo - wh, tan, gran to dns; abun Anhy; little "Red Marker" Shale
2190-2200	Little SS - wh mottled viol, mg, tite, NS; Dolo, Anhy & abun "Red Marker" Sh
2200-2210	Sh - dead blk, v/hd & brtl, fisl; Same a/a
2210-2220	Same a/a w/Dolo - lt to drk gry, gran to earthy
2220-2260	Dolo - tan, brn, wh, pnk; little Anhy; little SS - wh, fmg, tite, NS; Sh a/a
2260-2270	SS - gry, fcg, dolotc, tite, NS; Dolo, Anhy & Sh a/a

Begin 5' Samples

2270-2275	Dolo - gry to drk brn, microxln; SS - a/a, NS
2275-2285	Dolo - a/a; little Anhy - wh
2285-2290	Sh - blk, brittle, flakey; tr SS - gry, fmg, dolotc, tite, NS

SECOND LEO SANDSTONE 2290

2290-2300	SS - gry, fmg, v/dolotc grading to sdy dolo, tite, NS; little Anhy - wh, xln
2300-2311	Dolo - med gry, fn xln
Circ 2314	Sh - blk, silty, brittle
2314-2320	Dolo - med gry, microxln, prtly w/sctrd sd grns
2320-2325	SS - gry to wh, fmg, v/dolotc, tite, NS

Resume 10' Samples

2325-2335	Dolo - gry to wh, microxln, tite; Anhy - gry, sdy
2335-2345	Sh - blk, silty, hd
2345-2355	Dolo - gry, microxln, hd
2355-2363	Dolo - a/a w/abun Anhy - wh, xln
Circ 2363	SS - gry, mg, v/dolotc, tite, NS
2363-2375	Dolo - med gry, microxln; little Anhy - wh, xln
2375-2385	Sh - blk & drk brn, silty, carb
2385-2390	Dolo - med gry, microxln; little SS - wh to buff, fmg, dolotc, tite, NS
2390-2400	SS - a/a, NS
2400	TOTAL DEPTH

ConRoy #1 F. A. Peterson
C NE SE 22 T7S R1E
Fall River Co., South Dakota

DRILLING RECORD

Remarks

The original proposal was to drill a 12-1/4-inch surface hole to a depth of approximately 1050 feet and set surface casing at that point to shut off water flows which were anticipated from the Dakota, Lakota and Sundance Sandstones. From under surface a 7-7/8-inch hole was to be drilled to the total depth of approximately 2600 feet.

In practice, 30 feet of 14-inch conductor pipe was set in 30 feet of 17-1/4-inch hole. 8-3/4-inch pilot hole was drilled 30-645 feet, followed by 7-7/8-inch pilot hole 645-906 feet; reamed 12-1/4 inch from 30-847 feet; 7-7/8-inch pilot hole 906-1140 feet and reamed 12-1/4-inch from 947-1140 feet. 8-5/8-inch surface pipe was set at 1136 feet resulting in a successful water shut-off. The balance of the hole was drilled 7-7/8-inch to the total depth of 2400 feet. Lost circulation was encountered momentarily at 2025 feet, but was cured by the addition of lost circulation material. Because of deviation problems, 5-1/2 days were required to drill and ream the surface hole. Casing was set and the balance of the test was drilled in 8 days.

The test was drilled with a Unit U-34 rig utilizing two 671 GM Diesel draw works motors (300 HP) and a 214P Oil Well 7-1/4" x 14" mud pump with two 6-110 GM Diesel motors (600 HP).

Well History

12-10-65	Rig up; drill 30' of 17-1/4" conductor hole and set 30' of 14" conductor pipe
12-11-65	Drill 8-3/4" surface hole 30-663'
12-12-65	Drill 8-3/4" surface hole 633-645'; drill 7-7/8" surface hole 645-852'
12-13-65	Drill 7-7/8" surface hole 852-906'; ream surface hole 30-565' to 12-1/4"
12-14-65	Ream surface hole 565-847' to 12-1/4"
12-15-65	Drill 7-7/8" surface hole 906-1140'; ream 847-947' to 12-1/4"
12-16-65	Ream surface hole 947-1140 to 12-1/4"; set surface casing; W.O.C.
12-17-65	W.O.C.; drill cement 1093-1140; drill 7-7/8" hole 1140-1340'
12-18-65	Drill 7-7/8" hole 1340-1656'
12-19-65	Drill 7-7/8" hole 1656-1919'
12-20-65	Drill 7-7/8" hole 1919-2046'
12-21-65	Drill 7-7/8" hole 2046-2198'
12-22-65	Drill 7-7/8" hole 2198-2301'
12-23-65	Drill 7-7/8" hole 2301-2400' total depth; prepare to log
12-24-65	Run logs; plug and abandon

DRILLING RECORD (Cont'd.)

Bit Record

Bit #	Size	Make	Type	In	Out	Footage
1	8-3/4	HTCo	OSC3	30	646	Dr 616'/12 hrs.
2	7-7/8	HTCo	OSC3	646	845	Dr 199'/16 hrs.
3	7-7/8	HTCo	OWC	845	906	Dr 61'/ 7 hrs.
4	7-7/8	HTCo	LW3	906	1120	Dr 214'/16 hrs.
5	7-7/8	HTCo	LW3	1120	1140	Dr 20'/ 2 hrs.
6	12-1/4	Smith	DT	29	667	Rm 638'/16 hrs.
7	12-1/4	Smith	DT	667	847	Rm 180'/ 7 hrs.
8	12-1/4	HTCo	OSC3	847	1140	Rm 293'/ 8 hrs.
9	7-7/8	Smith	K2PJ	1140	1462	Dr 322'/12 hrs.
10	7-7/8	Reed	YS1R	1462	1656	Dr 194'/ 8 hrs.
11	7-7/8	Smith	K2PJ	1656	1854	Dr 198'/12 hrs.
12	7-7/8	HTCo	OWVJ	1854	1948	Dr 94'/10 hrs.
13	7-7/8	Smith	T2J	1948	2046	Dr 98'/12 hrs.
14	7-7/8	Reed	YMR	2046	2153	Dr 107'/13 hrs.
15	7-7/8	Reed	YHGJ	2153	2228	Dr 75'/12 hrs.
16	7-7/8	HTCo	OWV	2228	2273	Dr 45'/ 8 hrs.
17	7-7/8	Smith	4W4	2273	2321	Dr 48'/ 9 hrs.
18	7-7/8	HTCo	OWC	2321	2400	Dr 79'/10 hrs.

Casing Record

30' of 14" spiral weld conductor pipe at 30' w/10 sx
1125.36' of 8-5/8" surface casing at 1136.36 KB w/850 sx

Mud Program

The surface hole (30-1140') was drilled with weighted mud in anticipation of water flows from the Dakota, Lakota and Sundance Sandstones. The mud was maintained at an average weight of 11 lb/gal and an average viscosity of 50 sec/qt.

After surface casing, the balance of the hole was drilled with mud having the following average characteristics:

Weight	10.4 lb/gal
Viscosity	38 sec/qt
Water Loss	13 cc. API

A momentary loss of circulation occured at 2025' in the 4th Converse Sandstone. The condition was remedied with very little loss of mud by the addition of lost circulation material. No further trouble was encountered.

DRILLING RECORD (Cont'd.)

Plugging Record

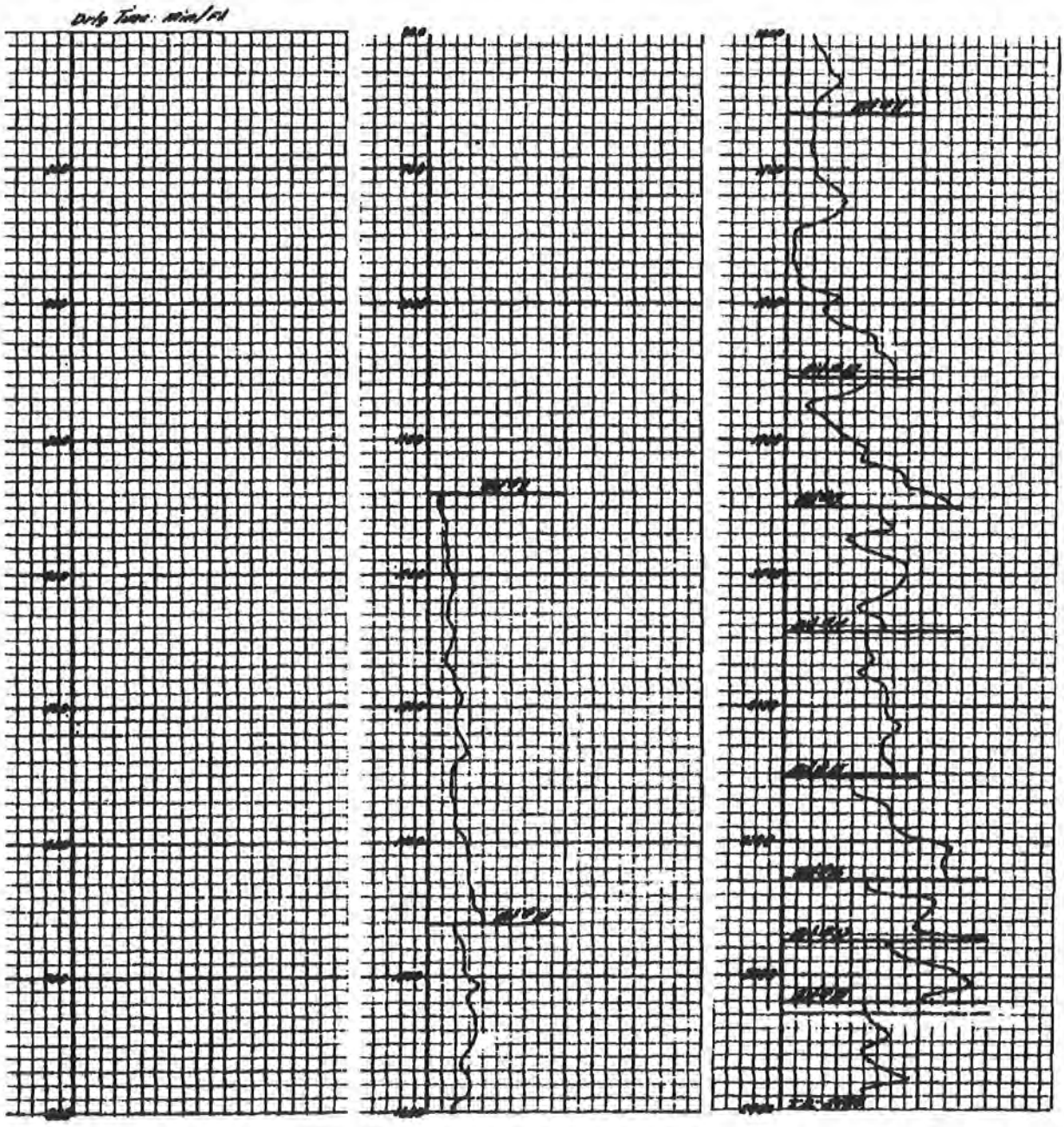
Used 50 sacks of cement to plug as follows:

1925-1850 w/25 sacks
1195-1120 w/25 sacks

In lieu of a surface plug, a cap was screwed and tack-welded to the surface casing to permit later re-entry for conversion to a water well.

CONROY #1 PETERSON
NE SE 22 T7S R1E
FALL RIVER CO., SD.

PENETRATION RATE



ADMINISTRATIVE / SUNDRY REPORTS

S. Dak. Oil & Gas Board
FORM 7

PLUGGING RECORD

Operator	Address
THE CONSOLIDATED ROYALTY OIL COMPANY	P. O. Box 605, Casper, Wyoming 82601

Name of Lease	Well No.	Field & Reservoir
F. A. Peterson	1	Wildcat

Location of Well	Sec-Twp-Rge or Block & Survey	County
1980' FEL and 1980' FSL of Section 22-7S-1E		Fall River

Application to drill this well was filed in name of	Has this well ever produced oil or gas	Character of well at completion (initial production): Oil (bbls/day)	Gas (MCF/day)	Dry?
COMPANY THE CONSOLIDATED ROYALTY OIL	No	- -	- -	Yes

Date plugged:	Total depth	Amount well producing when plugged: Oil (bbls/day)	Gas (MCF/day)	Water (bbls/day)
12-24-65	2400'	- -	- -	- -

Name of each formation containing oil or gas. Indicate which formation open to well-bore at time of plugging	Fluid content of each formation	Depth interval of each formation	Size, kind & depth of plugs used (indicate zones squeeze cemented, giving amount cement)
No oil or gas. Refer to well summary and sample description for details			1925' to 1850' - 25 sx; 1195' to 1125' - 25 sx.

CASING RECORD

Size pipe	Put in well (ft.)	Pulled out (ft.)	Left in well (ft.)	Give depth and method of perforating (shot, ripped etc.)	Packers and shoes
8-5/8"	1125.36'		All		Guide shoe, float collar and six centralizers

Was well filled with mud-laden fluid, according to regulations? Yes

Indicate depth of formation containing fresh water: Basal Sundance from 1102'-1120'

In addition to other information required on this form, if this well was plugged back for use as a fresh water well, give all pertinent details of plugging operations to base of fresh water sand, perforated interval for fresh water, and name and address of surface owner, and attach letter or other authority authorizing completion of this well as a water well and agreeing to assume full liability for any subsequent plugging which might be required.

With the verbal approval of Mr. Earl Cox, State Engineer, the cement plugs normally set in the bottom and top of the surface casing were omitted to allow the surface owner, Mr. Francis A. Peterson, P.O.Box 5, Burdock, South Dakota to convert the cased surface hole into a water well pending approval of Oil and Gas Board and Water Resources Commission. The water producing sands of the Dakota-Lakota series, Sundance and Basal Sundance formations were successfully cased off with 8-5/8" 24 lb. casing set in the Spearfish @ 1128' ground level. The surface casing string was cemented to surface with 850 sacks of cement with good returns of cement slurry (estimate 50 bbls.) flowing to reserve pit during displacement. No additional water zones were encountered while drilling below the surface casing to total depth. A casing protector with the abandonment marker welded on top has been screwed into the top casing collar at ground level and tack welded to permit later re-entry for conversion to a water well.

USE REVERSE SIDE FOR ADDITIONAL DETAIL

Executed this the 13th day of January, 19 66

State of WYOMING
County of NATRONA

Edward F. Rorke
Signature of Affiant

Before me, the undersigned authority, on this day personally appeared Edward F. Rorke known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on oath states, that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct.

Subscribed and sworn to before me this 13th day of January, 19 66

SEAL

My commission expires May 13, 1967

Notary Public in and for NATRONA County, WYOMING

DO NOT WRITE BELOW THIS LINE

Approved 6-14-66
Date

OIL AND GAS BOARD OF THE STATE OF SOUTH DAKOTA

Secretary

June 13, 1966

Note: File 2 copies of this form with Secretary, Oil & Gas Board, Pierre.

S. Dak. Oil & Gas Board
FORM 4

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

FARM OR LEASE NAME
F. A. Peterson
WELL NO.
1

TYPE OF COMPLETION
☐ Oil Well ☐ Gas Well ☒ DRY AND ABANDONED
☐ New Well ☐ Work-Over ☐ Deepen ☐ Plug Back ☐ Same Zone ☐ Diff Zone

FIELD AND POOL, OR WILDCAT
Wildcat

OPERATOR
THE CONSOLIDATED ROYALTY OIL COMPANY

NO. ACRES IN LEASE
1840 acres

ADDRESS
P. O. Box 605, Casper, Wyoming 82601

LOCATION (In feet from nearest lines of section or legal subdivision where possible)*
Surface
1980' FEL and 1980' FSL of Section 22-7S-1E, BHM
Top prod. interval
At total depth

SEC. TWP. RGE.
C NE¼ Sec. 22-7S-1E

COUNTY
Fall River

PERMIT NO.	DATE ISSUED	PREVIOUS PERMIT NO.	DATE ISSUED
408	**11-22-65**		

DATE SPUDDED	DATE T.D. REACHED	DATE COMPL. (Ready to Prod.)	ELEVATIONS (DF, RKB, RT, GR, etc.)*	ELEV. CASINGHEAD FLGE
12-11-65	**12-23-65**	- - -	**3522' Gr - 3533' RKB**	- -

TOTAL DEPTH (MD & TVD)	PLUG, BACK T.D. (MD & TVD)	IF MULTIPLE COMPL. HOW MANY*	INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
2400'	- - -		▶	**0' to 2400'**	**None**

PRODUCING INTERVAL(S), THIS COMPLETION, TOP, BOTTOM, NAME (MD & TVD)*
None

DATE DIRECTIONAL SURVEY SUBMITTED
None

TYPE ELECTRIC AND OTHER LOGS RUN (Circle those filed)
Sonic Log-Gamma Ray with Caliper, Dual Induction-Laterolog

WAS WELL CORED
No

CASING RECORD (Report all strings set in well)

CASING SIZE	DEPTH SET (MD)	HOLE SIZE	WEIGHT LBS./FT.	PURPOSE	SACKS CEMENT	AMOUNT PULLED
8-5/8"	**1196'**	**12-1/4"**	**24 lb.**	**Surface csg.**	**850**	**None**

LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

PERFORATION RECORD

DEPTH INTERVAL (MD)	HOLES PER FT.	SIZE AND TYPE	PURPOSE

ACID, SHOT, FRAC., CEMENT SQUEEZE, ETC.

AMOUNT AND KIND OF MATERIAL USED	DEPTH INTERVAL (MD)

PRODUCTION

DATE FIRST PRODUCTION | PRODUCING METHOD (Flowing, gas lift, pumping—size & type of pump) | WELL STATUS (Prod. or Shut-in)

DATE OF TEST | HOURS TESTED | CHOKE SIZE | PRODN. FOR TEST | OIL, Bbls. | GAS, Mcf. | WATER, Bbls. & % | OIL GRAVITY API (Corr.)

FLOW. TUBING PRESSURE | CASING PRESSURE | CALCULATED 24-HOUR RATE | OIL, Bbls. | GAS, Mcf. | WATER, Bbls. & % | GAS-OIL RATIO

DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) | TEST WITNESSED BY

LIST OF ATTACHMENTS
2 copies Well History
2 prints Sonic Log-Gamma Ray with Caliper
2 prints Dual Induction-Laterolog

I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

SIGNED: Leary F. Reis TITLE **Production Superintendent** DATE **1-13-66**

DO NOT WRITE BELOW THIS LINE
*See Instructions On Reverse Side

Approved 6-14-66
Date

OIL AND GAS BOARD OF THE STATE OF SOUTH DAKOTA
Secretary

CORRESPONDENCE

March 9, 1966

Mr. Earl J. Cox
South Dakota Geological Survey
Box 187
Belle Fourche, South Dakota

Dear Earl:

Reference is made to your letter of March 7, 1966, addressed to Mr. Bill Lewis, Bueno Drilling Company, concerning the Bueno #1 Holloway-State Well.

In the fifth paragraph, you stated that you assumed the various required reports had been sent to our office. We have received everything except two copies of the dual-induction laterolog, and two copies of the sonic gamma-ray log.

Sincerely,

Merlin J. Tipton
Assistant State Geologist

MJT:bm

P. S. We received the samples from the following wells today.

Consolidated Royalty #1 Peterson
NW SE 22-7S-1E
Fall River County

Consolidated Royalty #1 Childers
9-8S-2E
Fall River County

Consolidated Royalty #1 Superior-USA
10-9S-2E
Fall River,

nuary 31, 1966

Dr. Earl J. Cox
State Geological Survey
P. O. Box 187
Belle Fourche, S. Dak.

Dear Earl:

I am enclosing a dual induction-laterolog, sonic log-gamma ray for each of the following wells:

ConRoy #1 U.S.A. Superior
Fall River County

ConRoy #1 Childers
Fall River County

ConRoy #1 Peterson
Fall River County

Tenneco #1 USA-Ideun
Fall River County

Sincerely,

(Mrs.) Ruth Lynch
Bookkeeper

For the State Geologist

Enclosures 6

January 10, 1966

Re: ConRoy #1 Peterson
Fall River County

Mr. Earl J. Cox
State Geological Survey
Box 187
Belle Fourche, South Dakota

Dear Earl:

I think you are quite right that we do not need to involve Joe Grimes in taking over this particular well at this time. I think that it is advisable for us to keep close check with Mr. Peterson to see that he does fulfill the requirements of getting a permit to convert the well to water and to make sure that Joe is involved when such a conversion does take place.

As long as the marker has been placed and the mud pits filled and with Mr. Peterson's release I think we can say that all things have been fulfilled in qualifying this well for release as soon as we have received the information as stated in your letter.

I am being flooded with letters giving viewpoints about our changes in Rules and Regulations. At this time it appears that Gulf is definitely in the minority in their thinking and certainly the more letters that I can get to validate a particular position, that will be the direction in which I have to advise the board. When the time does come that a decision needs to be made, I want to sit down with you and go over all the correspondence to arrive at an adequate recommendation to give to the board for any rule changes. Possibly this could be done in Pierre sometime.

Earl, I want to express my sincere and deepest appreciation, as I have done to the personnel here, on your kindness in giving me the bowling ball this past Christmas. It does my heart a lot of good to know that the employees are behind the activities of the Survey 100% and you can be sure that I am going to do my utmost to see that the people in the Survey are given every benefit possible from the standpoint of improving the situation both in work and time.

Mr. Earl J. Cox Page 2 January 10, 1966

I have to go to Pierre this Wednesday to appear before the appropriations committee. The Governor does want to give us money for another ground water geologist. Although I did not ask for this money, the pressure outside has caused the administration to see fit to bend to this request and therefore asked me to give them a modest sum for inclusion in our budget to enhance our ground-water program. The sum that I asked for was $18,650.00 to be divided between salary O & M and direct match moneys for the USGS.

I feel somewhat remiss in the fact that E. Y. Berry responded to your letter about those plats to this office. I mislaid the correspondence and have just now found it. When you hear from Billings, I think it would be nice to write E. Y. Berry and inform him as to whether or not you achieved this material. His letter is enclosed.

Sincerely,

Duncan J. McGregor
State Geologist

DJM:bm

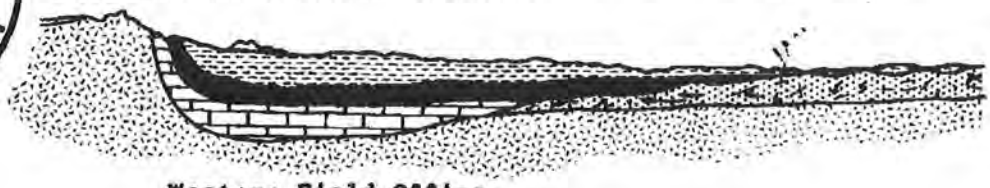
Enc.

POWERTECH (USA) INC.

SOUTH DAKOTA GEOLOGICAL SURVEY

...IENCE CENTER, UNIVERSITY OF SOUTH DAKOTA CAMPUS,
VERMILLION, 57069, PHONE 624-4471

WESTERN FIELD OFFICE, 208 GAY BUILDING, BELLE FOURCHE,
BOX 187, 57717, PHONE 892-3121



Western Field Office
January 6, 1966

Dr. Duncan McGregor
State Geologist
State Geological Survey
Vermillion, South Dakota

Re: Conroy #1 Peterson
NWSE-22-7S-1E
Fall River County, So. Dakota
Permit No. 408

Dear Duncan:

Enclosed is an original and copy of a letter from the landowner of the above test that is self-explanatory. Peterson's letter is addressed to you, rather than Joe Grimes, as the test may not be converted for a long time and it would seem pointless to have the Water Resources Commission assume jurisdiction of the well at this time. However, we can go through the procedure of turning it over to the Water Resources Commission if you feel this is the proper action to take.

The marker has been placed and the pits filled and smoothed. The location can be released from bond coverage after we have received the following:

One set of samples
Two copies of the dual induction log
Two copies of the sonic-gamma ray log
Two copies of the sample description
Final plugging forms.

Sincerely,

Earl Cox

Earl Cox
Engineering-Petroleum Geologist

EC:sn

Burdock, South Dakota
December 28, 1965

JAN -7

Dr. Duncan McGregor
State Geologist
State Geological Survey
Vermillion, South Dakota

Re: Conroy #1 Peterson
NWSE-22-7S-1E
Fall River County, So. Dakota
Permit No. 408

Dear Dr. McGregor:

At my request, the ten sack surface plug was eliminated in plugging the above test. It is planned that some time in the future, the surface casing in the hole will be perforated and the test made into an artesian water well.

Should the test be converted to a water well, in the future, I agree to assume full liability for any subsequent plugging that might be required.

Sincerely,

Francis A. Peterson

Francis A. Peterson

Burdock, South Dakota
December 28, 1965

Dr. Duncan McGregor
State Geologist
State Geological Survey
Vermillion, South Dakota

Re: Conroy #1 Peterson
NWSE-22-7S-1E
Fall River County, So. Dakota
Permit No. 408

Dear Dr. McGregor:

At my request, the ten sack surface plug was eliminated in plugging the above test. It is planned that some time in the future, the surface casing in the hole will be perforated and the test made into an artesian water well.

Should the test be converted to a water well, in the future, I agree to assume full liability for any subsequent plugging that might be required.

Sincerely,

Francis A. Peterson

Francis A. Peterson

Western Field Office
December 27, 1965

Mr. Francis A. Peterson
P. O. Box 5
Burdock, South Dakota

Re: Conroy #1 Peterson
NW¼-22-7S-1E
Fall River County, So. Dakota
Permit No. 408

Dear Mr. Peterson:

Following your request, the ten sack surface plug was not placed when the above test was plugged. To leave out this plug, it is necessary that you request it in writing.

Enclosed is an original and two copies of a letter to the State Geologist requesting that the surface plug not be required. Please sign the original and two copies and return them to me in the enclosed addressed envelope.

Sincerely,

Earl Cox

Earl Cox
Engineering-Petroleum Geologist

EC:sn

SOUTH DAKOTA

State Water Resources Commission

STATE OFFICE BUILDING

PIERRE, SOUTH DAKOTA

November 24, 1965

Francis A. Peterson
P. O. Box 5
Burdock, South Dakota

I have been advised that the Consolidated Royalty Oil Co. has obtained a Permit to Drill for Oil and Gas on your land in Section 22, T 7 S, R 1 E.

Occasionally, owners of land consider converting abandoned oil wells into water wells. Please advise me whether or not you intend to convert the oil well drill hole on your land into a water well if water is encountered and the drill hole is abandoned as an oil well.

If you are considering making a water well out of the abandoned oil well drill hole, special considerations are necessary to comply with the State's oil and water laws. The abandoned oil hole must be properly plugged and the water well properly constructed. All conversion work will be at your expense. The cost will vary, depending upon the characteristics of the drill hole, but such cost will be in the neighborhood of $5,000 or more. Usually another driller and drill rig will have to be arranged for. This other drill rig and casing and other materials will have to be on hand to take over immediately after the special oil well plugging is completed, because the drill hole cannot be left open for any appreciable length of time without spoiling it. Approval of plans for construction of the water well will be required, and a bond covering proper constructin may be required. Also, a water right may be required. All of these arrangements take considerable time to accomplish.

Please advise me immediately if you plan to convert the oil well drill hole into a water well. We both hope that a producing oil well results from the drill hole on your land; however, if not and you are planning on a water well, we must start making arrangements now.

Sincerely,

J.W. GRIMES
Chief Engineer

JWG/bw
cc Oil & Gas Board, Pierre, South Dakota
Dr. Duncan McGregor, State Geologist, Vermillion, S.D.

SCIENCE CENTER, UNIVERSITY OF SOUTH DAKOTA CAMPUS,
VERMILLION, 57069, PHONE 624-4471
WESTERN FIELD OFFICE, 208 BAY BUILDING, BELLE FOURCHE,
BOX 187, 57717, PHONE 892-3121

NOV 5 1965

Western Field Office
November 4, 1965

Dr. Duncan McGregor
State Geologist
State Geological Survey
Vermillion, South Dakota

Dear Duncan:

Just a note to let you know that Consolidated Royalty Oil Company will make application for permits on the following locations:

Conroy #1 Childers
NESE-9-8S-2E
Fall River County

Conroy #1 Petersen
NWSE-22-7S-1E
Fall River County

Conroy #1 Superior-USA
SESE-10-9S-2E
Fall River County

The first well will test the basal Sundance formation. The other two will test the second Lee Sand.

Consolidated Royalty is in the process of obtaining a $20,000 blanket bond. This would indicate that further tests are planned.

Sincerely,

Earl Cox

Earl Cox
Engineering-Petroleum Geologist

EC:sn

DUNCAN J. McGREGOR
DIRECTOR AND STATE GEOLOGIST
VERMILLION

MERLIN J. TIPTON
ASSISTANT STATE GEOLOGIST
VERMILLION

EARL J. COX
SENIOR GEOLOGIST
BELLE FOURCHE

SURETY

NO SURETY INFORMATION FOR THIS WELL AS OF 5/18/2011

MISCELLANEOUS

Rec'd 3-9-66

INVOICE

AMERICAN STRATIGRAPHIC COMPANY

1620 BROADWAY, DENVER · 524 E. YELLOWSTONE, CASPER · 17 NO. 31st ST. BILLINGS

March 2, 1966

NC 1825

South Dakota Geological Survey
Attn: Dr. Duncan McGregor
Science Center
Vermillion, South Dakota

P. O. No.

SOUTH DAKOTA SAMPLE CUTS

	Consolidated Royalty #1 Peterson NW SE 22-7S-1E Fall River County, South Dakota	N/C
	Consolidated Royalty #1 Childers 9-8S-2E Fall River County, South Dakota	
	Consolidated Royalty #1 Superior - USA 10-9S-2E Fall River County, South Dakota	

Department of Environment & Natural Resources

...Today

Oil and Gas Search for: *api_no_ like '40 047 20071'*

Page 1 of 1	Export Options (temporarily unavailable)	Page: 1

Record 1 of 1

Well Information

API No:	40 047 20071	**County:**	FALL RIVER
Well Name:	ARC 34-11 PETERSON	**Location:**	SWSE 11-7S-1E
Permit No:	776	**Total Depth:**	2250
Operator Name:	AQUARIUS RESOURCES CORPORATION	**Bottom Hole:**	Minnelusa
Permit Date:	11-10-1976	**KB Elevation:**	3689
Spud Date:	12-09-1976	**Ground Elevation:**	3679
Plug Date:	12-22-1976	**Latitude:**	43.451453
		Longitude:	-103.963826
Well Field	WILDCAT	**Status**	P&A
Class:	DRY HOLE	**Type:**	DRY HOLE

Formation Tops

Formation	Depth (ft.)
Morrison	406
Sundance	570
Spearfish	866
Goose Egg	1158
Minnekahta	1412
Opeche	1452
Converse	1552
Red Marker	1952
1st Leo	1964
2nd Leo	2062
3rd Leo	2168

Page 1 of 1 (goto top)	Page: 1 Next

ORIGINAL WELL CONSTRUCTION DURING OPERATION

API No. 4004720071
11-7S-1E

Surface

Surface Casing
8 5/8", 24#, set @
163' w/ 135 sx
to surface

Perforations
None (DH)

Hole Size
7 7/8" below surf
csg to TD

Total Depth
2250'

PLUGGING AND ABANDONMENT CONSTRUCTION

Surface

10 sx @ Surface

30 sx @ 105'-190'

50 sx 750'-900
(Sundance)

35 sx 1900'-2000'
(Minnelusa-Leo)

Feet of cement from Plugging Report
Mud wt. 9.3 #/gal

Surface

Surface Casing
8 5/8", 24#, set @
163' w/ 135 sx
to surface

Mud from 384'-TD

Total Depth
2250'

S. Geol. Surv. & Gas Board
FORM 9

SUNDRY NOTICES AND REPORT ON WELLS

FARM OR LEASE NAME: Peterson

WELL NO.: 34-11

☐ OIL WELL ☐ GAS WELL ☐ ---- ☒ DRY

FIELD AND POOL, OR WILDCAT: Wildcat

OPERATOR: AQUARIUS RESOURCES CORPORATION

NO. ACRES IN LEASE: 1080.00

ADDRESS: 307 Conroy Building, Casper, Wyoming 82601

LOCATION (In feet from nearest lines of section or legal subdivision, where possible): 660' FSL, 2217' FEL Section 11-7S-1E

¼ ¼ SEC. TWP. RGE.: SW SE 11-7S-1E

ELEVATIONS (D.F., R.K.B., R.T., GND., etc.; how determined): 3679' Gr., 3689' K.B.

COUNTY: Fall River

INDICATE BELOW BY CHECK MARK NATURE OF REPORT, NOTICE OR OTHER DATA

NOTICE OF INTENTION TO:			SUBSEQUENT REPORT OF:		
TEST WATER SHUT-OFF	___	SHOOT OR ACIDIZE	___	WATER SHUT-OFF	___	SHOOTING OR ACIDIZING	___
FRACTURE TREAT	___	REPAIR WELL	___	FRACTURE TREATMENT	___	REPAIRING WELL	___
MULTIPLE COMPLETE	___	PULL OR ALTER CASING	___			ALTERING CASING	___
ABANDON	X						

(Note: Report results of multiple completion on Well Completion or Recompletion and Log Form—Form 4)

DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work)

Water was encountered in all porous zones drilled. The Leo sand had excellent porosity but yielded sulphur water when tested. Proposed plugging as approved by telephone is as follows:

35 sx	1900-2000	Minnelusa-Leo
50 sx	750- 900	Sundance
30 sx	105- 190	base of surface casing
10 sx	Surface plug & erect dry hole marker	

I hereby certify that the foregoing as to all work or operation performed is a true and correct report of such work or operation.

SIGNED John F. Hutton TITLE President DATE December 23, 1976

DO NOT WRITE BELOW THIS LINE

Approved Jan. 4, 1977 Date

OIL AND GAS BOARD OF THE STATE OF SOUTH DAKOTA

CONDITIONS, IF ANY:

By Fred Steece

See Instructions On Reverse Side Supervisor

JAN 1977
RECEIVED
WESTERN FIELD OFFICE

Synopsis

Operator:	Aquarius - Double U - Powerco
Well:	#34-11 Peterson
Location:	C/SW SE; 660' FSL, 2217' FEL Section 11, T. 7S., R. 1E. Fall River County, South Dakota
Area:	Wildcat (Driftwood Canyon Prospect)
Elevation:	3679' Ground, 3689' K.B.
Spudded:	December 9, 1976 (7:30 A.M.)
Ceased Drilling:	December 22, 1976 (3:30 A.M.)
Completed:	December 23, 1976 (12:30 A.M.)
Status:	P & A
Total Depth:	2250' driller, 2248' log
Casing:	8-5/8" surface casing set @ 163'
Hole Size:	7-7/8" below surface to TD
Contractor:	A. C. Bullock Drilling Co. - Rig #1 Tool Pusher - Ray Cottrell Drillers - Larry Halligan, D. F. Ellsworth, Chuck Sides
Drilling Mud:	Wyoming Mud Co., Casper, Wyo. Gel-Chemical from 384' to TD Engineer - Bruce Johnson
Lost Circulation:	Lost Circulation for 5½ hours @ 384'.
Coring:	No cores cut.
Drill Stem Tests:	Halliburton Services DST #1; 2nd Leo, 2060'-2082' (adjusted to log from 2068'-2090') Rec. 125' muddy water, 1838' black sulfur water. Engineer - D. R. Rook, Gillette, Wyoming
Logs:	Schlumberger Well Surveying Corp. Ran Dual Induction-Laterolog from 2248' to base of surface casing. Ran Borehold Compensated Sonic Log w/caliper from 2248' to base of surface casing. Ran Gamma Ray log from base of surface casing to surface. Engineer - Craig Rang, Gillette, Wyo.
Samples:	All samples were delivered to American Stratigraphic Co., Casper, Wyo., for shipment to their Billings, Montana office where a cut will be made for the South Dakota State Geologist.

COUNTY:	**FALL RIVER**
LEGAL LOCATION:	**SWSE 11-7S-1E**
API NO:	**40 047 20071**
PERMIT NO:	**776**
WELL NAME:	**ARC #34-11 PETERSON**
OPERATOR:	**AQUARIUS RESOURCES CORPORATION**
PERMIT ISSUED:	**11/10/1976**
PERMIT CLOSED:	**01/05/1977**
FILE LOCATION:	**7S-1E-11 SWSE**

TARGET CODES:

WELL HISTORY / CHECKLIST

PERMIT TO DRILL / INTENT TO DRILL

WELL INSPECTION / SCOUT REPORTS

OPERATOR'S TECHNICAL REPORTS / MAPS

ADMINISTRATIVE / SUNDRY REPORTS

CORRESPONDENCE

SURETY

MISCELLANEOUS

WELL HISTORY / CHECKLIST

BOND RELEASE CHECKLIST

Well Name & Location

Aquarius #34-11 Peterson
SWSE 11-7S-1E - Fall River

Permit # 776

API # 40 047 20071

Bond # 19-130-1584-76 Date Issued Sept. 20, 1976 Date Released _____

Surface Restoration

✓ Pits filled

✓ Site level

✓ Site policed

✓ Dry-hole marker solid, sealed, correctly inscribed

— No dry-hole marker desired, letter in WFO files from surface owner

Paperwork filed

— Form 4 (Completion or Recompletion Report)

✓ Form 6 (Sundry Notices and Report on Wells)

✓ Form 7 (Plugging Report) (included on Form #6)

Geological Information Filed

✓ Well Logs: IES, SNP, DIL, GR, NEUT, CALI, Cement Bond, Temp, Micro, Laterlog, SM Dens, SONIC

✓ DST Charts and Reports

✓ Geologist's Report

— Results of coring and core analyses (None Cut)

✓ Set of 10-foot sample cuttings (check with Rob Schoon) (samples received @ Vermillion)

DATE 2-5-79 CHECKED BY John Fricke

PERMIT CHECKLIST

Well Name and Location:	Permit # 776
Aquarius #34-11 Peterson SWSE 11-7S-1E - Fall River	API # 40 047 20071
	Bond # 19-0130-1584-76

Paperwork filed with WFO

_X_ Organization Report

_X_ Application

_X_ Bond

_X_ Permit Fee

The Following Papers sent to Operator:

_X_ Permit (Form 2a)

_X_ Receipt for $100 permit fee

_X_ Cover letter explaining material sent

Permit Fee Filed:

_X_ Permit fee w/Cash Receipts Transmittal Form sent to State Treasurer

Notification of New Permit sent to:

_X_ Dr. Duncan J. McGregor

_X_ Mr. Vern W. Butler

_X_ Dr. Allyn Lockner

_X_ Mr. George Kane

DATE November 11, 1976 CHECKED BY Jean Miller, Secretary, WFO

PERMIT TO DRILL / INTENT TO DRILL

State Pub Co., Pierre

S. Dak. Oil & Gas Board
FORM 2

APPLICATION FOR PERMIT TO:

☒ DRILL ☐ DEEPEN ☐ PLUG BACK

☐ SINGLE ZONE

☒ OIL WELL ☐ GAS WELL ☐ MULTIPLE ZONE

FARM OR LEASE NAME: Peterson

WELL NO: 34-11

FIELD AND POOL OR WILDCAT: Wildcat

NO. ACRES IN LEASE: 1080.00

¼ ¼ SEC TWP RGE: SW SE 11-7S-1E

COUNTY: Fall River

OPERATOR: AQUARIUS RESOURCES CORPORATION

ADDRESS: 307 Conroy Building, Casper, Wyoming 82601

LOCATION (In feet from an established corner of the legal subdivision) *

1/ 660' from South line
2217' from East line
Section 11-7S-1E

NAME AND ADDRESS OF SURFACE OWNER:
Peterson and Son, Inc.
Edgemont, South Dakota 57735

ELEVATION: 3679' Gr.

NO. OF WELLS ETC: None

PROPOSED DEPTH: 2300'

ROTARY OR CABLE TOOLS: Rotary

NAME AND ADDRESS OF CONTRACTOR:
A. O. Bullock Drilling Company
P. O. Box 821
Casper, Wyoming 82602

APPROXIMATE DATE WORK WILL START: November 10, 1976

IF LEASE PURCHASED WITH ANY WELLS DRILLED, FROM WHOM PURCHASED (Name and address)

No

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	NEW OR SECOND HAND	DEPTH	SACKS OF CEMENT
12¼"	8-5/8"	24#	New	150'	125
7-7/8"	5-1/2"	15.5#	New	2300'	75

DESCRIBE PROPOSED OPERATIONS. IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOW OUT PREVENTER PROGRAM IF ANY

Drill a 7-7/8" hole from bottom of surface casing to estimated total depth of 2300 feet. Will test the Leo zones of Minnelusa formation. Drillstem test any zones with shows of oil and gas. If commercial production indicated will set 5½" casing to total depth, perforate and complete.

A double ram, hydraulically operated preventer (Shaffer 10" API Series 300) will be installed and will be tested to a minimum of 500 psi for 15 minutes prior to drilling out from under the surface casing. Deficiencies, if any, will be corrected before drilling ahead. The blowout equipment will be checked daily by opening and closing the pipe rams and blind rams.

SIGNED John F. Trotter TITLE President DATE November 4, 1976

DO NOT WRITE BELOW THIS LINE

PERMIT NO. 776

DATE ISSUED November 10, 1976

CHECKED BY [signature] Supervisor

Minerals and Public Lands Date

CONDITIONS

COMPLETE SET OF SAMPLES, AND CORES IF TAKEN, MUST BE SUBMITTED

SAMPLES AND CORES IF TAKEN, BELOW ____ DEPTH, MUST BE SUBMITTED

1/ Exception to statewide spacing pattern allowed for topographic reasons (see Murdock 7½ quad.) PVS

NOV 1976

INSTRUCTIONS

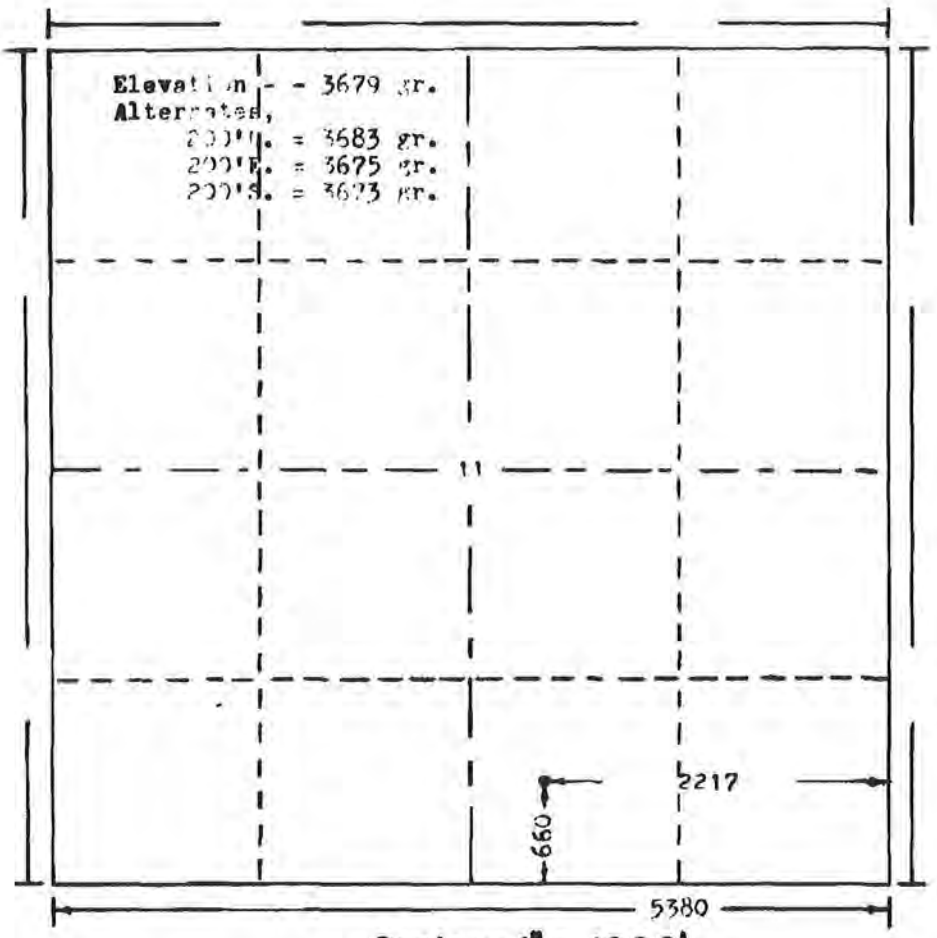
General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for ... by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations.

If the well is to be, or has been, directionally drilled, so state and show by attached sheets, if necessary, the coordinate location of the hole in any present or objective productive zones.

File 3 copies of this form with Secretary, Oil & Gas Board, Pierre.

* Sample location: 990' South and 660' East of the Northwest Corner of Section 10.)



T. 7 S.

Scale··· 1" = 1000'

Powers Elevation Company, Inc. of Denver, Colorado has in accordance with a request from Mr. Trotter for Aquarius Resources Corporation determined the location of #34-11 Peterson to be 660FS & 2217FE Section 11 Township 7 S. Range 1 E. of the Black Hills Meridian Fall River County, South Dakota

I hereby certify that this plat is an accurate representation of a correct survey showing the location of #34-11 Peterson

Date: 9-22-76

T. Tobin

Licensed Land Surveyor No.
State of South Dakota

WELL INSPECTION / SCOUT REPORTS

SOUTH DAKOTA GEOLOGICAL SURVEY
Western Field Office

SCOUT REPORT

Number 3

Date Scouted 5/31/78

Operator Aquarius Resources Corporation

Permit Number 776

Farm/Lease Name #34-11 Peterson

API Number 40 047 20071

SWSE Sec. 11 T. 7S R. 1E County Fall River

Elev. 3689 Kb Est. T.D. — Actual T.D. 2250 Spudded 11-09-76

Contractor

Geologist Eldred Johnson

SCOUT'S OBSERVATION:

Pits filled, landscape recontoured, wild grass and shrubs taking over, no seed planted. Dry hole marker sound, sealed, and properly labeled.

Site Approved.

DST RECORD:

FORMATION TOPS:

PLUGGING RECORD:

DATE PLUGGED/COMPLETED 12-22-76

CASING RECORD:

8 5/8 From 0 To 163

From To

SITE INSPECTION:

Approved X

Not Approved

REMARKS:

SCOUTED BY John Fricke

John Fricke, Geologist
Field Assistant

Fred V. Steece

Fred V. Steece, Supervisor
Western Field Office

SOUTH DAKOTA GEOLOGICAL SURVEY
Western Field Office

SCOUT REPORT

Number 2

Date Scouted 6-15-77

Operator Aquarius Resources Corporation — Permit Number 776

Farm/Lease Name #34-11 Peterson — API Number 40 047 20071

SWSE Sec. 11 T. 7S R. 1E — County Fall River

Elev. 3689 Kb — Est. T.D. - — Actual T.D. 2250 — Spudded 11-09-76

Contractor A. O. Bullock — Geologist Eldred Johnson

SCOUT'S OBSERVATION:
The site has not been restored. Mounds of dirt surround a pit that is practically dry. There is no fence and plenty of garbage is laying on the ground. A dry hole marker is in place and is solid, sealed and correctly marked. Near the marker pole is a small open hole and trench that should be filled in. The area has not been leveled or policed and therefore at this time cannot be approved.

DST RECORD:

FORMATION TOPS:

PLUGGING RECORD:

DATE PLUGGED/COMPLETED 12-22-76

CASING RECORD:

_____ From ____ To _____

_____ From ____ To _____

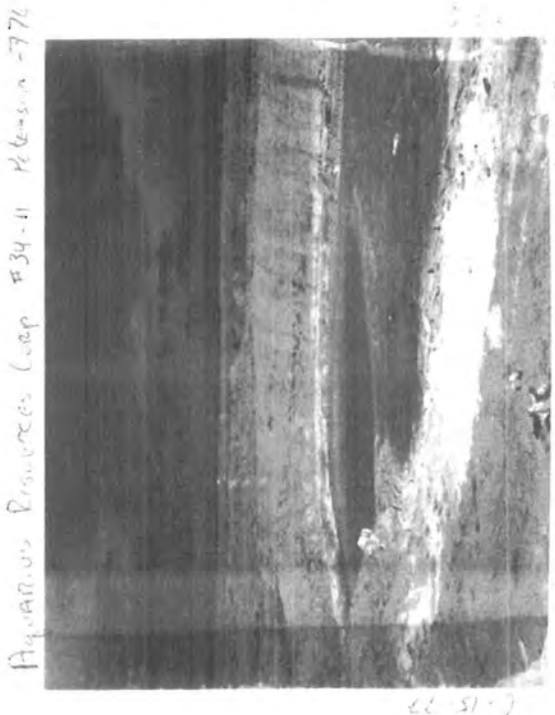
SITE INSPECTION:

Approved _____

Not Approved X

REMARKS: The site is difficult to locate since the road leading up to the drilling area is for the most part covered with grass and also because the uranium companies have made so many roads in their exploration efforts, which inevitably lead in the wrong direction. (3 pictures).

SCOUTED BY Fred V. Steece, Supervisor — David R. Johnston, Geologic Assistant



SOUTH DAKOTA GEOLOGICAL SURVEY
Western Field Office

SCOUT REPORT

Number 1

Date Scouted 12-22-76

Operator 1/ Aquarius Resources Corporation — Permit Number 776

Farm/Lease Name #34-11 Peterson — API Number 40 047 20071

SWSE Sec. 11 T. 7S R. 1E — County Fall River

Elev. 3689 Kb — Est. T.D. - — Actual T.D. 2250 — Spudded 11-09-76

1/ Contractor A. O. Bullock — Geologist Eldred Johnson

SCOUT'S OBSERVATION:

Preparing to plug.

DST RECORD:

DST #1: 2068-2090: 2nd Leo
Recovered 1963 water (125 MW, 1838 Blk. sulf. water)
RW = 2.16@ 48°F = 1200 ppm ce.

FORMATION TOPS:

Morrison	406	Opeche	1452	1st Leo	1964
Sundance	570	1st Converse	1552	2nd Leo	2062
Basal sand	819	Conv. Anhyd	1630	3rd Leo	2168
Spearfish	866	2nd Converse	1677		
Goosegg	1158	3rd Converse	1764		
Minnekahta	1412	Red Marker	1952		

PLUGGING RECORD:

DATE PLUGGED/COMPLETED 12-22-76

35 sax: 2000-1900 Red Marker
50 sax: 900- 750 Basal Sundance
25 sax: 190- 120 Base Surface
10 sax: Surface plug w/marker

CASING RECORD:

8 5/8 From 0 To 163

From To

SITE INSPECTION:

Approved

Not Approved

REMARKS:

(W/135 sax)

SCOUTED BY Fred W. Steece

Fred W. Steece, Supervisor

1/ Casper, Wyoming.

POWERTECH (USA) INC.

API ID 40 047 20071

Aquarius Res. Corp. # Peterson 34-11a — MIRT — 12-10-76

SWSE 11-7S-1E Fall River

660 FSL & 2217 FEL — Progress Report

PERMIT:	776 (11-10-76)	12-06	MIRT
API:	40 047 20071	12-7	MIRT
ELEV:	3679 Gr., 3689 KB	12-8	RURT
CONTR:	A.O. Bullock (Casper)	12-9	Spud
GEOL:	Eldred Johnson	12-10	set surface
ENGR:		12-11	386 lost circ.
SPUD:	12-9-76 (7:30 AM)	12-12	486 drlg
EST T.D.:	2300	12-13	688 drlg
CASING:	8 5/8 - 153 @ 164 KB w/175 sxs	12-14	967 drlg
CORES:	none	12-15	1243 drlg
DST'S:	#1: 2068-2094, [redacted] recd water	[redacted] -16	1515 drlg.
LOGS:	[redacted]	[redacted] -17	1663 drlg
T.D.:	2250 drlr 2 [redacted]	[redacted]	
PLUG:	12-22-76 [redacted]	[redacted]	

tj Casper

POWERTECH (USA) INC.

API 40 047 20071

Formation Tops (Spl)		Formation Tops: (Eldred Johnson)	
Minnekahta	1407	Morrison	406
Opeche	1454	Sundance	570
ML 1st Converse	1540	(basal sd)	819
Converse Anhyd	1636	Spearfish	866
		Goose Egg	1158
12-22-76		Minnekahta	1412
Call from Eldred		Opeche	1452
Johnson, wanting		1st Converse	1552
plugging instr. &		Conv. Anhyd	1630
outlined the follow-		2nd Converse	1677
ing:		3rd Converse	1764
		Red Marker	1952
35 sax: 2000 - 1900 Leo - Converse		1st Leo	1964
50 sax: 900 - 750 Basal Sund.		2nd Leo	2062
25 sax: 190 - 120 base surf		3rd Leo	2168
10 sax: Surf plug w/ marker		T.D.	2250

DST #1: 2065 - 2090, 2nd Leo
Rec 1963 water (125'
MW, 1838 Blk sulfur
water) Almost flowed,
forced log almost
off scale.
Rw = 2.16 @ 40°F = 1200 BOH

1-15-77 Site has not been restored.
Mound of dirt surrounds a
pit that is practically
dry. No fence. alot of
garbage. Dry hole marker
Solid sealed & correctly
marked. Should be leveled
and policed. DCG

OPERATOR'S TECHNICAL REPORTS / MAPS

AQUARIUS RESOURCES CORPORATION

John F. Trotter, President

Aquarius Resources Corporation
#34-11 Peterson
C SW SE Sec. 11, T. 7S., R. 1E.
Fall River County, South Dakota
Elev. - Gr. 3679', KB 3689'
Well Permit #776

DAILY DRILLING REPORT

12/06/76 Moving equipment to #34-11 Peterson

12/07/76 Moving equipment to drillsite

12/08/76 Rigging up

12/09/76 Finished rigging up and started drilling rat hole @ 2:00 A.M. Spudded surface hole @ 7:30 A.M. Drilled 12¼ in. hole to 164 ft. K.B. Set 153 ft. of 24# 8-5/8" casing @ 164 ft. K.B. with 135 sx cement, 2% $CaCl_2$

12/10/76 Finished setting surface casing, plug down @ 1:00 A.M. Good returns to surface. W.O.C. Expect to drill out early this afternoon.

Drilled out at midnight.

12/11/76 8:00 A.M. - PTD - 319'. Lost circulation @ 386'

12/12/76 8:00 A.M. - PTD - 486'. Drilling. Made trip for bit @ 447'

12/13/76 8:00 A.M. - PTD - 688' - drilling.

12/14/76 8:00 A.M. - PTD - 967' - drilling in the red beds. Drilled 279' in last 24 hours.

12/15/76 8:00 A.M. - PTD - 1243' - drilling. Drilled 276 ft. in last 24 hours. Repairing mud pump - 8 hours. M.W. - 9.6; Visc. - 31 Made trip for bit #4 @ 978 ft.

12/16/76 8:00 A.M. - PTD - 1515' - drilling. Drilled 272 ft. in last 24 hours.

12/17/76 8:00 A.M. - PTD - 1663' - drilling. M.W. - 9.1, Visc. - 32 Drilled 148' in last 24 hours. Tripped for bit @ 1553'. Dropped one drill collar - lost approximately 6 hours fishing.
Sample tops: Minnekahta - 1407' (+2282)
Opeche - 1454' (+2235)
1st Converse - 1540' ?
Converse Anhydrite - 1636' (+2053)

12-06-76 Moving equipment to #34-11 Peterson

307 Conroy Building • Casper, Wyoming 82601 • (307) 265-9025

POWERTECH (USA) INC.

TICKET NO. 771061

	O. D.	I. D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Reversing Sub	6"	2.75"	1'	
Water Cushion Valve				
Drill Pipe	4½"	3.826"	1795'	
Drill Collars	6 1/4"	2.25"	242'	
Handling Sub & Choke Assembly				
Dual CIP Valve				
Dual CIP Sampler	5"	.87"	6.65'	2039'
Hydra-Spring Tester	5"	.75"	5'	2044'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3"	4'	2045'
Hydraulic Jar	5"	1.5"	5'	
VR Safety Joint	5"	1"	2.5'	
Pressure Equalizing Crossover				
Packer Assembly	7"	1.53"	6'	2060'
Distributor	5"	1.68"	2'	
Packer Assembly	7"	1.53"	6'	2068'
Flush Joint Anchor				
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case				
Drill Collars				
Anchor Pipe Safety Joint	5"	1.5"	4'	
Packer Assembly				
Distributor				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars				
Flush Joint Anchor	5"	2.37"	12'	
Blanked-Off B.T. Running Case	5"	3"	4'	2086'
Total Depth				2090'

FORM 157-BT—PRINTED IN U.S.A.

EQUIPMENT DATA

LITTLE'S FORMS 700 6/94

20

GEOLOGICAL REPORT AND WELL HISTORY

Aquarius - Double U - Powerco

#34-11 Peterson

Section 11, T. 7S., R. 1E.

Fall River County, South Dakota

Eldred D. Johnson
830 Trigood Dr.
Casper, Wyoming 82601
Phone: 23 4-8568

I N D E X

Synopsis

Operator:	Aquarius - Double U - Powerco
Well:	#34-11 Peterson
Location:	C/SW SE; 660' FSL, 2217' FEL Section 11, T. 7S., R. 1E. Fall River County, South Dakota
Area:	Wildcat (Driftwood Canyon Prospect)
Elevation:	3679' Ground, 3689' K.B.
Spudded:	December 9, 1976 (7:30 A.M.)
Ceased Drilling:	December 22, 1976 (3:30 A.M.)
Completed:	December 23, 1976 (12:30 A.M.)
Status:	P & A
Total Depth:	2250' driller, 2248' log
Casing:	8-5/8" surface casing set @ 163'
Hole Size:	7-7/8" below surface to TD
Contractor:	A. O. Bullock Drilling Co. - Rig #1 Tool Pusher - Ray Cottrell Drillers - Larry Halligan, D. F. Ellsworth, Chuck Sides
Drilling Mud:	Wyoming Mud Co., Casper, Wyo. Gel-Chemical from 384' to TD Engineer - Bruce Johnson
Lost Circulation:	Lost Circulation for 5½ hours @ 384'.
Coring:	No cores cut.
Drill Stem Tests:	Halliburton Services DST #1; 2nd Leo, 2060'-2082' (adjusted to log from 2068'-2090') Rec. 125' muddy water, 1838' black sulfur water. Engineer - D. R. Rook, Gillette, Wyoming
Logs:	Schlumberger Well Surveying Corp. Ran Dual Induction-Laterolog from 2248' to base of surface casing. Ran Borehold Compensated Sonic Log w/caliper from 2248' to base of surface casing. Ran Gamma Ray log from base of surface casing to surface. Engineer - Craig Rang, Gillette, Wyo.
Samples:	All samples were delivered to American Stratigraphic Co., Casper, Wyo., for shipment to their Billings, Montana office where a cut will be made for the South Dakota State Geologist.

Page 2
#34-11 Peterson
Sec. 11-7S-1E
Fall River County, S. D.

Chronological History

Date	8:00 A.M. Depth	Data
12/8/76	Rigging up	
12/9/76	Drilling surface hole	Spudded @ 7:30 A.M. Drilled 12¼" surface hole to 163' @ 8:30 P.M.
12/10/76	PTD 163', W.O.C.	Made 163' Set 8-5/8" surface casing @163' K.B. w/135 sacks regular cement, 3% $CaCl_2$, ¼# Flo Cele per sack. Plug down @ 1:00 A.M. W.O.C. Began drilling cement @ 6:00 P.M.
12/11/76	Drilling @ 319'.	Made 156'. Drilled out from under cement @ 2:00 A.M. Lost circulation @ 384' @ 8:45 A.M. Regained circulation and resumed drilling @ 2:45 P.M.
12/12/76	Drilling @ 486'.	Made 167'. Shut down @ 5:45 P.M. to repair pump. Resumed drilling @ 10:30 P.M.
12/13/76	Drilling @ 688'.	Made 202'.
12/14/76	Drilling @ 968!	Made 280'. Started trip @ 978' @ 10:00 A.M. Resumed drilling @ 6:30 P.M. after trip & working on pump for 4-3/4 hrs.
12/15/76	Drilling @ 1234'.	Made 266'.
12/16/76	Drilling @ 1517'.	Made 283'. Started trip @ 1553' @ 1:00 P.M. Dropped bottom hole drill collar to bottom @ 3:00 P.M. Fished out drill collar w/rig overshot and resumed drilling @ 11:45 P.M.
12/17/76	Drilling @ 1663".	Made 146'.
12/18/76	Drilling @ 1823'.	Made 160'. Started trip @ 1852' @ 1:45 P.M. Spent 4-3/4 hrs replacing carrier bearing in torque converter. Resumed drilling @ 8:45 P.M.
12/19/76	Drilling @ 1939'.	Made 116'.
12/20/76	PTD 2086'. W.O.O.	Made 147'. Reached 2086' @ 5:30 A.M. Circulated samples & W.O.O. for DST till 8:30. Drilled to 2092' @ 9:00. Started out of hole for DST #1 @10:00 A.M. SLM 2092 - 9090

Page 3
#34-11 Peterson
Sec. 11-73-1E
Fall River County, S. D.

Began picking up test tools @ 1:00 P.M. On bottom testing @ 4:20 P.M. Finished testing @ 7:00 P.M. Out of hole w/test tools @ 11:00 P.M. DST #1: 2nd Leo, 2068-2090. Rec. 125' muddy water, 1838' blkok sulfur water.

12/21/76 Drilling @ 2133'.

Made 49'.
Resumed drilling after test @ 3:45 A.M.

12/22/76 TD 2250' going in hole w/logging tool.

Made 117'.
Reached TD of 2250' @ 3:30 A.M. Started out of hole for logs @ 5:00 A.M. Began rigging up loggers @ 7:30 A.M. Ran Dual Induction Laterolog from 2248' to base of surface casing. Ran Borehole Compensated Sonic log w/caliper from 2248' to base of surface casing. Ran Gamma Ray log from base of surface casing to surface. Finished logging @ 1:00 P.M. Prep to P & A.

12/23/76 TD 2250' driller 2248' log

Set 35 sack plug from 1900'-2000' across "Red Shale Marker".
Set 50 sack plug from 750'-900' across Basal Sundance sandstone.
Set 30 sack plug across casing shoe from 105'-190'.
Set regulation marker in top of surface casing w/10 sacks.
Plug down @ 12:30 A.M.
P & A

Bit Record

Bit No.	Size	Make	Type	Serial #	Depth Out	Feet	Hrs Run
1	7-7/8	Hughes	OSC3-J	1-Y3708	447	284	29
2	7-7/8	Hughes	J-44	Re-Run	978	531	49½
3	7-7/8	Hughes	OW4-J	RD475	1553	575	42
4	7-7/8	Hughes	J-33	Re-Built	1852	299	36½
5	7-7/8	Hughes	J-55	Re-Run	2250	398	56

Deviation Surveys

Depth	Deviation
1850	2¼°

Drill Stem Test Data

DST #1; 2nd Leo sandstone, 2060'-2088' (adjusted to log from drillers depth of 2068'-2090')

Open 11 min. SI 30 min. Open 60 min. SI 60 min.
Tool opened on pre-flow w/very strong blow, off bottom of 5 gal. bucket in 30 sec., remained steady for 11 min. Tool re-opened on final flow off bottom of 5 gal. bucket, began gradually decreasing after 12 min., decreased to surface bubbles after 44 min., decreasing to intermittent surface bubbles @ end of test.
No gas - to - surface.
Recovered 1963' fluid; 125' muddy water, 1838' black sulfur water. Rw = 2.16 @ 48° F. 1200 ppm chlorides.
Sample chamber contained 2175 cc black sulfur water, 0# pressure

pre-flow				final flow			
IFP	294#	ISIP	882#	IPP	593#	IHP	979#
FFP	588#	FSIP	882#	FFP	882#	FHP	983#

BHT 78° F.

Tested by Halliburton Services
Engineer - D. R. Rook, Gillette, Wyo.

Schlumberger Log Analysis

Hulett sandstone

Depth	Rw	Rt	ϕ	Sw
708	2.5	20	30%+	80%
718	2.5	18	30%+	70%

Basal Sundance sandstone

Depth	Rw	Rt	ϕ	Sw
870-885	5.0	20	30%+	100%

1st Converse sandstone

Depth	Rw	Rt	ϕ	Sw
1592	8	8	30%+	70%

2nd Converse sandstone

Depth	Rw	Rt	ϕ	Sw
1686	3.5	50	28%	100%
1728	3.5	150	12%	100%

2nd Leo sandstone

Depth	Rw	Rt	ϕ	Sw
2078	2.0	25	30%+	80%
2088	2.0	18	30%+	85%

Engineer - Craig Bang, Gillette, Wyo.

Electric Log Tops

Formation	Depth	Datum (K.B.)
Morrison formation	406	+3283
Sundance formation	570	+3119
Basal Sundance sandstone	866	+2823
Spearfish formation	888	+2801
Goose Egg formation	1158	+2531
Minnekahta limestone	1412	+2277
Opeche shale	1452	+2237
1st Converse sandstone	1552	+2137
Converse anhydrite	1630	+2059
2nd Converse sandstone	1677	+2012
3rd Converse sandstone	1764	+1925
"Red Shale Marker"	1952	+1737
1st Lee sandstone zone	1964	+1725
2nd Lee sandstone zone	2062	+1627
3rd Lee sandstone zone	2168	+1521
TD	2248	+1441

Sample Descriptions

Samples were examined under the binocular microscope during the drilling of the well in December, 1976, using 10X eyepiece and 1X and 2X objective lenses. 10' samples were caught from under surface to TD. Sample quality was generally fair to good. The following sample descriptions were condensed from the well-site description with the depths adjusted to the E-log to compensate for lag.

From	To	Feet	Description
1350	1412	62	Sh, red orange, soft, silty, interbedded w/red orange sltst, soft - firm, sdy, anhy & scatt anhy, wht, fn - v fn xln, soft - firm, sucrosic - massive.
Minnekahta limestone			1412 (+2277) log
1412	1436	24	Dol, cream - lt tan, some lavender gray, v fn - microxln, anhy, limey in part, firm - hrd, brittle, w/anhy, wht - pink, v fn xln, massive, some sucrosic, firm.
1436	1452	16	Ls, cream - wht, some pink, v fn - microxln, anhy in part, firm - hrd, brittle, w/anhy, wht, fn - v fn xln, sucrosic, some massive, soft - firm.
Opeche shale			1452 (+2237) log
1452	1490	38	Sh, drk rust red, soft, silty, anhy.
1490	1515	25	Sh aa, w/interbedded anhy, wht, v fn xln, sucrosic, some massive, soft - firm.
1515	1535	20	Sh, rust red, soft, silty, anhy, grdng to sltst, rust red - red red orange, firm, sdy, shly, anhy.
1535	1552	17	Sh, rust red, soft, silty, anhy & some rust red - red orange, shly, sdy, sltst aa, interbedded w/ls, wht - cream & tan, v fn -

			microxln, firm - hrd, brittle, anhy, w/some anhy, wht, v fn xln, sucrosic, soft.
1st Converse sandstone			1552 (+2137) log
1552	1580	28	Ss, wht - lt pink & buff, fn - med grn, s ang - s rnd, anhy filled in part, sli dolo, firm - fri, fr - gd, some poor P & P, NS. Scatt anhy, wht, v fn xln, massive, some sucrosic, firm.
1580	1600	20	Ss, wht - pink & buff, some red @ base of interval, fn - med grn, s ang - s rnd, anhy filled in part, sli dolo, poor - gd P & P, NS. Some scatt anhy aa.
1600	1630	30	Ss, red - pink, some wht, fn grn, some med, s ang - s rnd, anhy filled, dolo in part, firm - fri, poor - fr, some gd P & P, NS.
Converse anhydrite			1630 (+2059) log
1630	1660	30	Anhy, wht, v fn xln, firm, some hrd, massive - sucrosic.
1660	1677	17	Anhy wht, fn - v fn xln, massive, some sucrosic, firm - soft, w/dol, pink, v fn - microxln, hrd, brittle, anhy.
2nd Converse sandstone			1677 (+2012) log
1677	1682	5	Ss, red - buff, fn grn, some med, s rnd - s ang, anhy filled, silty in part, dolo, firm - fri, no - poor P & P, NS.
1682	1690	8	Ss, lt red orange - buff, fn grn, some med, s rnd - s ang, anhy filled, dolo, firm - fri, poor - fr P & P, NS.
1690	1720	30	Ss, lt red orange, fn grn, some med, anhy filled, fri, no - poor P & P, NS, w/anhy, wht, v fn xln, sucrosic - massive, firm - soft.
1720	1736	16	Dol, lt gry w/blk mottling, & tan v fn granular, firm, limey, somewhat brittle.
1736	1750	14	Dol, tan - lt gry, some blk mottling, v fn - microxln, firm - hrd, brittle, limey w/some anhy, wht, fn - v fn xln, massive - sucrosic, firm - soft.
1750	1764	14	Anhy, wht - gry, fn - v fn xln, massive, some sucrosic, firm - hrd, some soft w/some scatt ss, wht, fn grn, s rnd - s ang, anhy filled, dolo, hrd,- firm, some fri, no P & P, fnt - poor lt yell fluor, no cut.
3rd Converse sandstone			1764 (+1925) log
1764	1774	10	Ss, wht, fn grn, s rnd - s ang, anhy filled, dolo, firm - fri, no - poor P & P, some fnt fluor, no cut, w/anhy aa, wht - gry, fn - v fn xln, massive, some sucrosic, firm - hrd, some soft.

1774	1796	24	Dol, tan - gry, some brn, v fn granular, some v fn - microxln, firm - hrd, brittle, limey w/some anhy, wht - brn, some gry, fn - v fn xln, massive, some sucrosic, firm - hrd, some soft. Scatt stringers of ss, wht - pink, fn grn, s rnd - s ang, anhy filled, dolo, firm - fri, no - poor P & P, some poor - fr lt yell fluor, no cut.
1796	1810	14	Dol, lt pink - cream & v lt gry, v fn - microxln, firm - hrd, brittle, anhy w/scatt ss, wht, fn grn, s rnd - s ang, anhy filled, firm - fri, no - poor P & P, fnt, tr fr lt yell fluor, no cut.
1810	1860	50	Anhy, wht - gry, fn - v fn xln, massive - sucrosic, firm - hrd, some soft w/some interbedded dol, pink - cream & lt tan - gry, v fn - microxln, some granular, firm - hrd, brittle, anhy in part, w/scatt stringers of ss, wht - lt gry, some buff, s rnd - s ang anhy filled, dolo, firm - fri, no - poor P & P, sli tr fr fluor, no cut, 99% NS.
1860	1884	24	Sh, rust red, soft, silty, anhy, sli dolo, interbedded w/dol, tan - gry, some lavender, v fn - microxln & granular, firm - hrd, brittle, anhy.
1884	1926	42	Dol lt tan - lavender pink & lt gry, v fn - microxln, firm - hrd, brittle, anhy, w/anhy wht, v fn - fn xln, massive - sucrosic, firm - soft. Scatt interbedded sh, drk rust red, soft, silty, sli dolo, anhy & some scatt ss, wht - v lt pink, fn grn, s rnd - s ang, anhy filled, dolo, firm - fri, poor - fr P & P, NS.
1926	1938	12	Dol, cream - lt tan, & pink - lt gry, v fn - microxln, hrd - firm, brittle, anhy, limey.
1938	1952	14	Dol, lt gry - tan & pink, v fn - microxln, firm - hrd, brittle, anhy, limey in part, sdy in part, w/ss, wht - lt pink, fn grn, some med, s rnd - s ang, anhy filled, dolo, firm - fri, poor P & P, tr fnt - poor fluor, no cut.
<u>"Red Shale Marker"</u>			1952 (+1737) log
1952	1964	12	Sh, rust red w/metallic luster from finely disseminated mica, v soft, fissile w/some interbedded ls @ base of interval, tan - cream, some pink, v fn - microxln, firm - hrd, brittle, dolo, & anhy, wht, v fn - fn xln, massive - sucrosic, firm - soft.
<u>1st Leo sandstone zone</u>			1964 (+1725) log
1964	1976	12	Dol, lt tan, v fn - microxln, hrd - firm, brittle, anhy.
1976	2000	24	Ss, wht - med gry & v lt pink, fn grn, s rnd - s ang, anhy filled, dolo, firm - fri, no - poor P & P, sli tr blk dead oil stn, tr fnt fluor, no cut, mostly NS, w/scatt dol, pink - cream, v fn - microxln, hrd - firm, anhy, brittle.

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#34-11 Petersen
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Fall River County, S. D.

2000	2020	20	Dol, med gry - gry brn, w/blk mottling, v fn granular - v fn xln, firm - hrd, brittle, anhy, limey & anhy w/brn mottling, v fn xln, massive, some sucrosic, firm, w/some ss, med gry - tan, fn grn, s rnd - s ang, anhy filled, dolo, firm - fri, no P & P, some tr blk dead oil stn, poor - fr lt yell fluor, no cut.
2020	2046	26	Dol tan - brn & gry, v fn - microxln, some granular, hrd - firm, brittle, anhy, somewhat limey w/interbedded anhy, wht w/some brn mottling, fn - v fn xln, massive, some sucrosic, firm - soft.
2046	2062	16	Dol, tan - gry brn, v fn xln - granular, firm - hrd, anhy, somewhat limey, brittle w/ss, wht - tan, fn grn, some med, s rnd - s ang, anhy filled in part, dolo, firm - fri, no - fr P & P, some tr blk dead oil stn, sli tr brn oil (?) stn, fnt lt yell fluor, no cut. Some tr hrd blk carb, silty sh @ base of interval.
<u>2nd Lee sandstone zone</u>			2062 (+1627) log
2062	2072	10	Dol tan - lt gry, v fn xln, sdy, hrd, brittle, grdng in part to v dolo ss, w/interbedded wht ss, fn grn, s rnd - s ang, anhy filled in part, dolo in part, firm - fri, poor - fr P & P, fnt - poor fluor, no cut.
2072	2102	30	Ss, wht - clear, fn - med grn, s rnd - s ang, anhy matrix, sli dolo, fri, fr - gd P & P, sli tr blk dead oil stn, fnt lt yell fluor, no cut.

Samples were circulated @ 2076' and 2082' for 1 hr @ each point before DST #1
DST #1; 2060'-2082' (adjusted to log from 2068'-2090' driller's depth)
(See page 4 for DST data)

2102	2110	8	Ss, lt gry, fn grn, s rnd - s ang, anhy filled, dolo, firm, no P & P, poor - fr lt yell fluor, no cut.
2110	2146	36	Dol, med gry - brn & tan, v fn - microxln, hrd, brittle w/scatt anhy, wht, v fn xln, massive - sucrosic, & some scatt ss, lt gry, fn grn, s rnd - s ang, anhy filled, dolo, firm, no P & P, poor - fr lt yell fluor, no cut. Some interbedded sh, hrd, blk, carb, silty, brittle.
2146	2168	22	Dol, med gry - grn brn, some tan, v fn - microxln, some v fn granular, firm - hrd, brittle, anhy, w/some scatt ss, lt med gry, fn grn, s rnd - s ang, anhy filled, dolo, firm, no P & P, poor - fr fluor, no cut. Scatt blk, car silty, sh, firm - hrd.
<u>3rd Lee sandstone zone</u>			2168 (+1521) log
2168	2178	10	Ss, wht, fn grn, s rnd - s ang, anhy filled, sli dolo, firm - fri, no - poor P & P, fnt lt yell fluor, no cut.
2178	2204	26	Dol, tan, v fn - microxln, firm - hrd, brittle, anhy w/anhy, wht, fn - v fn xln, massive, some sucrosic, firm - soft. Some blk carb silty sh @ base of interval, firm - hrd.

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#34-11 Peterson
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Fall River County, S. D.

2204	2250	46	Dol, tan - gry cry. v fn - microxln & v fn granular, firm - hrd, brittle w/some interbedded sh, gry, wht, fn - v fn xln, massive - sucrosic, firm - soft. Some scatt stringers of ss, wht - lt gry & tan, fn grn, s rnd - s ang, anhy filled, iolo, firm - hrd, no P & P, tr blk dead oil stn, fnt - fr, some gd lt yell fluor, no cut.

Samples circulated for 1 hr @ TD before logging

TD 2250' drilled
2248' Log

Drilling time was kept on a Geograph drilling time recorder. A drilling time log was constructed for each 2' interval on a scale of 5" = 100' from 1300' to TD. The original drilling time chart and the drilling time log were delivered to the offices of Aquarius Resources Corp., Casper, Wyo.

Eldred A. Johnson

Powertech (USA) Inc.

TICKET NO. 771061

API ID 40 047 20071 — 34 of 47

	O.D.	I.D.	LENGTH	DEPTH
Drill Pipe or Tubing				
Reversing Sub	6"	2.75"	1'	
Water Cushion Valve				
Drill Pipe	4½"	3.826"	1795'	
Drill Collars	6 1/4"	2.25"	242'	
Handling Sub & Choke Assembly				
Dual CIP Valve				
Dual CIP Sampler	5"	.87"	6.65'	2039'
Hydro-Spring Tester	5"	.75"	5'	2044'
Multiple CIP Sampler				
Extension Joint				
AP Running Case	5"	3"	4'	2045'
Hydraulic Jar	5"	1.5"	5'	
VR Safety Joint	5"	1"	2.5'	
Pressure Equalizing Crossover				
Packer Assembly	7"	1.53"	6'	2060'
Distributor	5"	1.68"	2'	
Packer Assembly	7"	1.53"	6'	2068'
Flush Joint Anchor				
Pressure Equalizing Tube				
Blanked-Off B.T. Running Case				
Drill Collars				
Anchor Pipe Safety Joint	5"	1.5"	4'	
Packer Assembly				
Distributor				
Packer Assembly				
Anchor Pipe Safety Joint				
Side Wall Anchor				
Drill Collars				
Flush Joint Anchor	5"	2.37"	12'	
Blanked-Off B.T. Running Case	5"	3"	4'	2086'
Total Depth				2090'

FORM 107-81—PRINTED IN U.S.A.

EQUIPMENT DATA

LITTLE'S [illegible] 20

Gauge No. 48			Depth 2045'					Clock No. 9984			12 hour	Ticket No. 771061			
	First Flow Period		First Closed In Pressure			Second Flow Period		Second Closed In Pressure			Third Flow Period		Third Closed In Pressure		
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.
0	.0000	288	.0000		624	.0000	651	.0000		880					
1	.0199*	389	.0068**		836	.0738***	790	.3950		882					
2	.0332	462	.0203		857	.1408	847								
3	.0465	523	.0338		863	.2079	868								
4	.0597	576	.0473		868	.2749	876								
5	.0730	624	.0608		870	.3419	878								
6			.0744		872	.4090	880								
7			.0879		874										
8			.1014		876										
9			.1149		876										
10			.1284		878										
11			.1420		878										
12			.1555		880										
13			.1690		880										
14			.1825		880										
15			.1960		880										
Gauge No. 47			Depth 2086'					Clock No. 9479			12 hour				
0	.0000	337	.0000		635	.0000	676	.0000		894					
1	.0199*	415	.0068**		849	.0731***	806	.3920		898					
2	.0332	479	.0204		870	.1395	860								
3	.0465	538	.0340		877	.2059	881								
4	.0597	587	.0476		883	.2723	890								
5	.0730	635	.0612		888	.3387	891								
6			.0747		888	.4050	894								
7			.0883		888										
8			.1019		890										
9			.1155		892										
10			.1291		892										
11			.1427		894										
12			.1563		894										
13			.1699		894										
14			.1835		894										
15			.1971		894										
Reading Interval	2		2			10									Minutes

REMARKS: *First interval is equal to 3 minutes. ** = 1 minute *** = 11 minutes.

FORM 100-R1—PRINTED IN U.S.A.

SPECIAL PRESSURE DATA

LITTLE'S 36073 7SC 8/74

~~API ID 40 047 20074~~ ~~36 of 47~~

FLUID SAMPLE DATA

Sampler Pressure	P.S.I.G. at Surface
Recovery: Cu. Ft. Gas	
cc. Oil	
cc. Water	2175
cc. Mud	
Tot. Liquid cc.	
Gravity	° API @ °F.
Gas/Oil Ratio	cu. ft./bbl.

	Resistivity		Chloride Content
Recovery Water	2.16 @ 48 °F.		1200 ppm
Recovery Mud	@ °F.		ppm
Recovery Mud Filtrate	@ °F.		ppm
Mud Pit Sample	1.42 @ 41 °F.		700 ppm
Mud Pit Sample Filtrate	1.40 @ 41 °F.		700 ppm
Mud Weight	9.3	vis	50 sec

Date	12-20-76	Ticket Number	771061
Kind of Job	OPEN HOLE	Halliburton District	GILLETTE
Tester	D.R. ROOK	Witness	MR. JOHNSON MR. JOE FAIR
Drilling Contractor	BULLOCK DRILLING COMPANY SM		

EQUIPMENT & HOLE DATA

Formation Tested	#2 Leo Sand
Elevation	3679' groune level Ft.
Net Productive Interval	10' Ft.
All Depths Measured From	Kelly bushing
Total Depth	2090' Ft.
Main Hole/Casing Size	7 7/8"
Drill Collar Length	242' I.D. 2.25"
Drill Pipe Length	1795' I.D. 3.826"
Packer Depth(s)	2060-2068' Ft.
Depth Tester Valve	2044' Ft.

Cushion	Type	Amount	Depth Back Pres. Valve Ft.	Surface Choke	3/8"	Bottom Choke	3/4"

Recovered 125 Feet of brownish colored water

Recovered 1838 Feet of black colored sulphur water

Recovered Feet of

Recovered Feet of

Recovered Feet of

Meas. From Tester Valve

Remarks SEE PRODUCTION TEST DATA SHEET ... No gas to the surface.

TEMPERATURE	Gauge No. 48 Depth: 2045 Ft.		Gauge No. 47 Depth: 2086 Ft.		Gauge No. Depth: Ft.		TIME	
	12 Hour Clock		12 Hour Clock		Hour Clock		Tool Opened	A.M. 1615 P.M.
Est. 75 °F.	Blanked Off no		Blanked Off yes		Blanked Off		Opened Bypass	A.M. 1855 P.M.
Actual 78 °F.	Pressures		Pressures		Pressures			
	Field	Office	Field	Office	Field	Office	Reported Minutes	Computed Minutes
Initial Hydrostatic	979	1019	998	1034				
First Period Flow Initial	294	288	346	337			—	—
First Period Flow Final	588	624	605	635			11	11
First Period Closed in	882	880	907	894			30	29
Second Period Flow Initial	593	651	652	676			—	—
Second Period Flow Final	882	880	907	894			60	61
Second Period Closed in	882	882	907	898			60	59
Third Period Flow Initial							—	—
Third Period Flow Final								
Third Period Closed in								
Final Hydrostatic	983	1000	998	1017			—	—

Legal Location Sec.-Twp.-Rng.	11-7S 1 E
Lease Name	PETTERSON
Well No.	34-11
Test No.	1
Field Area	NORTH OF EDGMONT
Tested Interval	2068 - 2090'
County	FULL RIVER
Lease Owner/Company Name	AQUARIUS RESOURCES CORPORATION
State	SOUTH DAKOTA

FORM 181-R6—PRINTED IN U.S.A.

FORMATION TEST DATA

LITTLE'S 100060 6M 6/76

20

POWERTECH (USA) INC.

771061

Casing perfs. _____ Bottom choke _____ Surf. temp. _____ °F Ticket No. _____

Gas gravity _____ Oil gravity _____ GOR _____

Spec. gravity _____ Chlorides _____ ppm Res. _____ @ _____ °F

INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED _____

Date Time a.m. p.m.	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
1300					On location
1315					Made up tools
1355					Started in hole
1615					Opened tool with a strong blow at
					bottom of bucket, remained same until
					closed in.
1625					Closed tool, blow died in 9 minutes.
1655					Opened tool with blow at bottom
					of bucket, after 12 minutes appeared
					to start decreasing.
					In 28 minutes had 1" off bottom of
					bucket.
					In 35 minutes had 9½" into bucket
					In 37 minutes had 2½" in bucket
					In 38 minutes had 1½" in bucket
					In 40 minutes had 1" in bucket
					In 42 minutes - 1/2" in bucket
					In 44 minutes had surface bubbles.
					Remained same until closed in.
1755					Closed tool - dead.
1855					Pulled loose with no trouble.

FORM 103-R1—PRINTED IN U.S.A.

PRODUCTION TEST DATA

LITTLE'S FORM NO 6/74

ADMINISTRATIVE / SUNDRY REPORTS

S. Dak. Oil & Gas Board
FORM 7

PLUGGING RECORD

Operator	Address
AQUARIUS RESOURCES CORPORATION	307 Conroy Building, Casper, Wyoming 82601

Name of Lease	Well No.	Field & Reservoir
Peterson	34-11	

Location of Well	Sec-Twp-Rge or Block & Survey	County
C SW SE Section 11-7S-1E		Fall River

Application to drill this well was filed in name of	Has this well ever produced oil or gas	Character of well at completion (initial production): Oil (bbls/day)	Gas (MCF/day)	Dry?
Aquarius Resources Corp.	No			Yes

Date plugged	Total depth	Amount well producing when plugged: Oil (bbls day)	Gas (MCF day)	Water (bbls/day)
December 23, 1976	2250'	None		None

Name of each formation containing oil or gas. Indicate which formation open to well bore at time of plugging	Fluid content of each formation	Depth interval of each formation	Size, kind & depth of plugs used. Indicate zones squeeze cemented, giving amount cement
Minnelusa-Leo	sulphur water	1[illegible]	[illegible] sx 1400-2[illegible]
Converse	Gyp water	1552	
Sundance-basal	water	819	50 sx 750-900
Base Surf. Csg.	-	162	25 sx 130-180
Top Surf. Csg.	-	Dry hole marker	10 sx

CASING RECORD

Size pipe	Put in well (ft.)	Pulled out (ft.)	Left in well (ft.)	Give depth and method of parting casing (shot, ripped etc.)	Packers and shoes
8-5/8"	162 ft.		162 ft.		

Was well filled with mud laden fluid, according to regulations? Yes

Indicate deepest formation containing fresh water: Fall River-Lakota

In addition to other information required on this form, if this well was plugged back for use as a fresh water well, give all pertinent details of plugging operations to base of fresh water sand, perforated interval to fresh water sand, name and address of surface owner, and attach letter from surface owner authorizing completion of this well as a water well and agreeing to assume full liability for any subsequent plugging which might be required.

Fall River-Lakota	- behind surface casing in part		Minnelusa:	
Morrison	-	406	Converse	1552
Sundance	-	570	Red Marker	1952
basal Sand	-	819	Leo	1964
Spearfish	-	866	Total Depth	2250 drlr. & Sch.
Goose Egg	-	1158		
Minnekahta	-	1412		
Opeche	-	1452		

USE REVERSE SIDE FOR ADDITIONAL DETAIL.

Executed this the 30th day of December, 19 76

State of Wyoming

County of Natrona

John F. Trotter
Signature of Affiant

Before me, the undersigned authority, on this day personally appeared John F. Trotter known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on oath states, that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct.

Subscribed and sworn to before me this 30th day of December, 19 76

SEAL

HELEN E. YUTESLER - Notary Public, County of Natrona, State of Wyoming, My Commission Expires Aug. 11, 1977

My commission expires 8/11/1977

Helen E. Yutesler
Notary Public in and for Natrona County, Wyoming

DO NOT WRITE BELOW THIS LINE

Approved Jan. 5, 1977
Date

OIL AND GAS BOARD OF THE STATE OF SOUTH DAKOTA

Fred V. Steece
Supervisor

JAN 1977 RECEIVED WY... FIELD OFFICE

Note: File 2 copies of this form with Secretary, Oil and Gas Board.

S. Dak. Oil & Gas Board
FORM 6

SUNDRY NOTICES AND REPORT ON WELLS

FARM OR LEASE NAME: Peterson

WELL NO.: 34-11

☐ OIL WELL ☐ GAS WELL ☐ .... ☒ DRY

FIELD AND POOL, OR WILDCAT: Wildcat

OPERATOR: AQUARIUS RESOURCES CORPORATION

NO. ACRES IN LEASE: 1080.00

ADDRESS: 307 Conroy Building, Casper, Wyoming 82601

LOCATION (In feet from nearest lines of section or legal subdivision, where possible): 660' FSL, 2217' FEL Section 11-7S-1E

¼ ¼ SEC TWP RGE: SW SE 11-7S-1E

ELEVATIONS (D.F., R.K.B., R.T., GRD., etc.; how determined): 3679' Gr., 3689' K.B.

COUNTY: Fall River

INDICATE BELOW BY CHECK MARK NATURE OF REPORT, NOTICE OR OTHER DATA

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF		SHOOT OR ACIDIZE		WATER SHUT-OFF		SHOOTING OR ACIDIZING	
FRACTURE TREAT		REPAIR WELL		FRACTURE TREATMENT		REPAIRING WELL	
MULTIPLE COMPLETE		PULL OR ALTER CASING				ALTERING CASING	
ABANDON	X			(Note: Report results of multiple completion on Well Completion or Recompletion and Log Form—Form 4)			

DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work)

Water was encountered in all porous zones drilled. The Leo sand had excellent porosity but yielded sulphur water when tested. Proposed plugging as approved by telephone is as follows:

35 sx	1900-2000	Minnelusa-Leo
50 sx	750- 900	Sundance
30 sx	105- 190	base of surface casing
10 sx		Surface plug & erect dry hole marker

I hereby certify that the foregoing as to any work or operation performed is a true and correct report of such work or operation.

SIGNED John A. Trotter (signature) TITLE President DATE December 23, 1976

DO NOT WRITE BELOW THIS LINE

Approved Jan. 5, 1977 (Date)

OIL AND GAS BOARD OF THE STATE OF SOUTH DAKOTA

(signature) Supervisor

CONDITIONS, IF ANY:

See Instructions On Reverse Side

JAN 1977 ... FIELD OFFICE

CORRESPONDENCE

NOV 15 1976

November 10, 1976

Aquarius Resources Corporation
307 Conroy Building
Casper, WY 82601

Attention John F. Trotter

Gentlemen:

Enclosed is your copy of Permit #776 (Form 2a) and approved Application to Drill (Form 2) covering the Aquarius #34-11 Peterson oil test in Fall River County, South Dakota. A copy of the permit should be posted at the well site. Also enclosed is a receipt for your $100 permit fee.

Please make weekly drilling progress reports to the Western Field Office.

May I wish you success in your drilling venture and if there is anything I can do to be of help, please let me know.

Sincerely,

Fred V. Steece
Supervisor, Western Field Office

FVS/jm
Enc. 3
cc: Dr. Duncan J. MacGregor
Mr. Vern W. Butler
Dr. Allyn Lockner
Mr. George Kane

SURETY

NO SURETY INFORMATION FOR THIS WELL AS OF 5/18/2011

MISCELLANEOUS

NO MISCELLANEOUS INFORMATION FOR THIS WELL AS OF 5/18/2011

Department of Environment & Natural Resources ...Today

Oil and Gas Search for: *api_no_ like '40 047 20074'*

Page 1 of 1	**Download Database** (Excel spreadsheet format)	Page: Prev 1 Next

Record 1 of 1

Well Information

API No:	40 047 20074	**County:**	FALL RIVER
Well Name:	WULF 1 PETERSON	**Location:**	NENE 21-7S-1E
Permit No:	903	**Total Depth:**	2500
Operator Name:	CRYSTAL OIL COMPANY	**Bottom Hole:**	Minnelusa
Permit Date:	12-13-1978	**KB Elevation:**	3539
Spud Date:	03-10-1979	**Ground Elevation:**	3533
Plug Date:		**Latitude:**	43.433117
		Longitude:	-103.997735
Well Field	WILDCAT	**Status**	P&A
Class:	DRY HOLE	**Type:**	DRY HOLE

Formation Tops

Formation	Depth (ft.)
Dakota Mud	235
Lakota	545
Sundance	840
Minnelusa	1840
Red Marker	2267
1st Leo	2290
2nd Leo	2382

Page 1 of 1 (goto top)	Page: Prev 1 Next

COUNTY:	**FALL RIVER**
LEGAL LOCATION:	**NENE 21-7N-1E**
API NO:	**40 047 20074**
PERMIT NO:	**903**
WELL NAME:	**WULF #1 PETERSON**
OPERATOR:	**CRYSTAL OIL COMPANY**
PERMIT ISSUED:	**12/13/1978**
PERMIT CLOSED:	**05/08/1979**
FILE LOCATION:	**7N-1E-21 NENE**

TARGET CODES:

WELL HISTORY / CHECKLIST

PERMIT TO DRILL / INTENT TO DRILL

WELL INSPECTION / SCOUT REPORTS

OPERATOR'S TECHNICAL REPORTS / MAPS

ADMINISTRATIVE / SUNDRY REPORTS

CORRESPONDENCE

SURETY

MISCELLANEOUS

WELL HISTORY / CHECKLIST

BOND RELEASE CHECKLIST

Well Name & Location
Wulf #1 Peterson
NENE 21-7S-1E, Fall River

Permit # 903
API # 40 047 20074

Bond # 708E675-4 Date Issued 10-25-78 Date Released OCT 03 1986

Surface Restoration

✓ Pits filled

✓ Site Level

✓ Site policed

NA Dry-hole marker solid, sealed, correctly inscribed

X No dry-hole marker desired, letter in WFO files from surface owner

✓ Letter of approval from Surfaceowner.

Paperwork filed

___ Form 4 (Completion or Recompletion Report)

✓ Form 6 (Sundry Notices and Report on Wells)

✓ Form 7 (Plugging Report)

Geological Information Filed

✓ Well Logs: IES, SNP, DIL, GR, NEUT, CALIP, (Cement Bond) Temp, Micro, Laterlog, SN Dens. (BCSL) (DI-SFL)

NA DST Charts and Reports

✓ Geologist's Report

✓ Results of coring and core analyses

✓ Set of 10-foot sample cuttings (check with Bob Schoon)

✓ Crystal #1 Peterson - Core from 2378'-2434' - at SDSM&T

Date OCT 3 1986 Checked By [signature]

PERMIT CHECKLIST

Well Name and Location:	Permit # 903
Wulf #1 Peterson NENE 21-7S-1E, Fall River	API # 40 047 20074
	Bond # 708E675-4

Paperwork filed with WFO

X Organization Report

X Application

X Bond

X Permit Fee

The Following Papers sent to Operator:

X Permit (Form 2a)

X Receipt for $100 permit fee

X Cover letter explaining material sent

Permit Fee Filed:

X Permit fee w/Cash Receipts Transmittal Form sent to State Treasurer

Notification of New Permit sent to:

X Dr. Duncan J. McGregor

X Mr. Vern W. Butler

X Dr. Allyn Lockner

X Mr. George Kane

DATE 12-13-78 CHECKED BY Cheryl Pederson

PERMIT TO DRILL / INTENT TO DRILL

State Pub. Co., Pierre

APPLICATION FOR PERMIT TO:

S. Dak Oil & Gas Board
FORM 2

☒ DRILL ☐ DEEPEN ☐ PLUG BACK

☒ SINGLE ZONE

☒ OIL WELL ☐ GAS WELL ☐ MULTIPLE ZONE

FARM OR LEASE NAME: Peterson

WELL NO.: #1

OPERATOR: Wulf Oil Corporation

FIELD AND POOL, OR WILDCAT: Wildcat

ADDRESS: P. O. Box 1320 - Chadron, Nebraska 69337

NO. ACRES IN LEASE: 1200.00

LOCATION (In feet from nearest lines of section or legal subdivision, where possible)*: 660' FNL - 658' FEL Section 21

¼ ¼ SEC. TWP. RGE: NE¼NE¼ Sec. 21, T7S, R1E

COUNTY: Fall River

NAME AND ADDRESS OF SURFACE OWNER: Peterson & Son, Inc. Edgemont, S. D.

ELEVATION: 3,533 GR

PROPOSED DEPTH: 2,400'

NO. OF WELLS ETC: 1

ROTARY OR CABLE TOOLS: Rotary

NAME AND ADDRESS OF CONTRACTOR: Northern Wyoming Drilling Co., Inc. Box 746 Chadron, Nebraska 69337

APPROXIMATE DATE WORK WILL START: December 28, 1978

IF LEASE PURCHASED WITH ANY WELLS DRILLED, FROM WHOM PURCHASED (Name and address)

N/A

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	NEW OR SECOND HAND	DEPTH	SACKS OF CEMENT
~~12¼"~~	8 5/8"	24#	New	250'	200 sx.
7 7/8"	5½"	15.50#	New	2,400'	150 sx.

DESCRIBE PROPOSED OPERATIONS. IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOW OUT PREVENTER PROGRAM IF ANY

We plan to drill a 2,400' well into the Leo Formation. We plan to start the well Dec. 28, 1978 with operations lasting approximately 14 days.

Northern Wyoming Drlg. Rig #2 is equipped with a 10" Ragan Blowout Preventor which will be used while drilling the well.

DEC 1978
RECEIVED
WESTERN
FIELD
OFFICE

SIGNED [signature] TITLE Vice-President Operator DATE 12-1-78

DO NOT WRITE BELOW THIS LINE

PERMIT NO. 903

APPROVAL DATE December 13, 1978

CHECKED BY [signature] School and Public Lands Date

Supervisor, Western Field Office

CONDITIONS:

☐ COMPLETE SET OF SAMPLES, AND CORES IF TAKEN, MUST BE SUBMITTED.

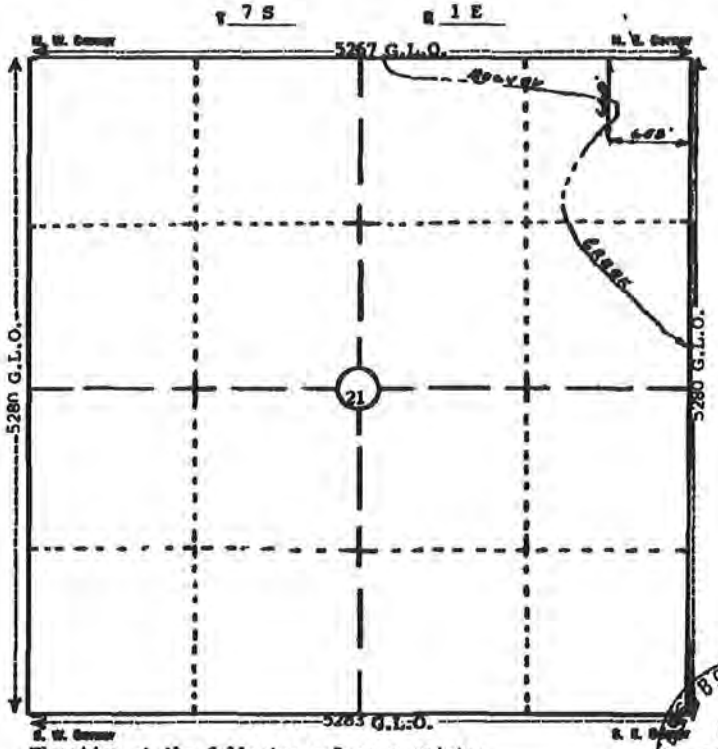
☐ SAMPLES AND CORES IF TAKEN, BELOW ... DEPTH, MUST BE SUBMITTED.

SOUTH DAKOTA
STATE GEOLOGICAL SURVEY
WESTERN FIELD OFFICE

PLAINS ENGINEERING
A DIVISION OF HOSKINS-WESTERN-SONDEREGGER, INC.
ENGINEERS • ARCHITECTS • PLANNERS • SURVEYORS

P.O. BOX 737 • NEWCASTLE, WY 82701 • 307-746-2754
1413 MAIN ST. • ANGEL CITY, MT 59301 • 406-322-5666
P.O. BOX 432 • BUFFALO, WY 82834 • 307-684-7978
S.H.P.A.L. BLDG. • HOT SPRINGS, SD 57747 • 605-745-5035
P.O. BOX 2030 • GILLETTE, WY 82716 • 307-682-7280

T 7 S R 1 E



Elevation at the following reference points:

130' North (on bank of Beaver Creek) - 3532'
150' West (on bank of Beaver Creek) - 3533'
200' South - 3532'
200' East (possible alternate site) - 3537.4'

I Lawrence T. Price of Newcastle, Wyoming, certify that in accordance with a request from Sherry Samuels of Gillette, Wyoming for Mulf Oil Corp. P. O. Box 1320, Chadron, Nebraska 69337

That I [illegible] made a survey (date) November 29, 1978 for the location and elevation of the #1 Peterson Wellsite

As shown on above map, the wellsite is in NE¼ NE¼ Section 21, Township 7 South, Range 1 East, Fall River County, South Dakota. Elevation is 3533 feet above mean sea level befor dozing.

Licensed Surveyor No.

789663.54
Notes in Bk 312 Pg 46

WELL INSPECTION / SCOUT REPORTS

SOUTH DAKOTA GEOLOGICAL SURVEY
Western Field Office

SCOUT REPORT

Number 4

Date Scouted 8-7-79

Operator Wulf Oil & Crystal

Permit Number 903

Farm/Lease Name #1 Peterson

API Number 40 047 20074

NENE Sec. 21 T. 7S R. 1E County Fall River

Elev. 3533 Gr. Est. T.D. 2400 Actual T.D. 2500 Spudded 3-10-79

Contractor N. Wyoming Drilling Geologist Jim Cox

SCOUT'S OBSERVATION:

Site clean, level, no dry hole marker (as requested by landowner), site approved.

DST RECORD:

FORMATION TOPS:

PLUGGING RECORD:

DATE PLUGGED/COMPLETED 4-7-79

CASING RECORD:

8 5/8 From 0 To 250

____ From ____ To ____

SITE INSPECTION:

Approved X

Not Approved ____

REMARKS:

SCOUTED BY Tim Kenyon

Tim Kenyon
Geologic Assistant

Fred V. Steece

Fred V. Steece, Supervisor
Western Field Office

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SOUTH DAKOTA GEOLOGICAL SURVEY
Western Field Office

SCOUT REPORT

Number 2 7 J

Date Scouted _____

Operator Wulf Oil & Crystal

Permit Number 903

Farm/Lease Name #1 Peterson

API Number 40 047 20074

NENE Sec. 21 T. 7S R. 1E County Fall River

Elev. 3533 Gr. Est. T.D. 2400 Actual T.D. 2500 Spudded 3-10-79

Contractor Northern Wyoming Drilling Geologist Jim Cox

SCOUT'S OBSERVATION:

4-9-79: Pits filled but surface is not leveled. Surface plug not in yet, and no dry hole marker erected. Dozer still at site.

5-15-79: Pits filled and surface leveled to original topography. No seed planted.

DST RECORD:

FORMATION TOPS:

PLUGGING RECORD:

DATE PLUGGED/~~COMPLETED~~ 4-7-79

CASING RECORD:

8 5/8 From 0 To 250

_____ From _____ To _____

SITE INSPECTION:

Approved _____

Not Approved _____

REMARKS:

Mr. Peterson requested that no dry hole marker be erected. Peterson also wanted us to hold the bond since he and Joe Banks haven't come to an agreement yet.

SCOUTED BY John Fricke

John Fricke
Geologic Assistant

Fred V. Steece, Supervisor
Western Field Office

SOUTH DAKOTA GEOLOGICAL SURVEY
Western Field Office

SCOUT REPORT

Number 1

Date Scouted _____

Operator Wulf Oil & Crystal

Permit Number 903

Farm/Lease Name #1 Peterson

API Number 40 047 20074

NENE Sec. 21 T. 7S R. 1E County Fall River

Elev. 3533 Gr Est. T.D. 2400 Actual T.D. _____ Spudded 3-10-79

Contractor Northern Wyoming Drilling Geologist Jim Cox, Gillette Wy

Joe Banks, owner, Gillette, WY

SCOUT'S OBSERVATION:

3-6-79: Still MIRT'S, performing minor repairs.

3-22-79: Drilling at 2434. DST #1, 2nd Leo (misrun). Presently down hole with core barrel (core #4). Plan to drill down to 2500'. Good oil shows reported in cores #1 & #3.

DST RECORD:

FORMATION TOPS:

PLUGGING RECORD:

DATE PLUGGED/COMPLETED _____

Core #1, 17', 2378-2395
#2, 2', 2395-2397
#3, 25', 2397-2422
#4, 12', 2422-2434

CASING RECORD:

8 5/8 From 0 To 250

_____ From _____ To _____

SITE INSPECTION:

Approved _____

Not Approved X

REMARKS:

Mylo Wisman, toolpusher. Will probably spud tomorrow, and test should last approximately 2 weeks. Location extremely muddy.

SCOUTED BY John Fricke Fred V. Steece

John Fricke
Geologic Assistant

Fred V. Steece, Supervisor
Western Field Office

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Wulf #1 Peterson 15-1-21 NE¼ SE

5/22/95: MM received a call from Wayne Peterson, the landowner. He discovered water surfacing in his alfalfa field several months ago, near the well location. He dug down almost to the wellhead, and the flow increased substantially. Mr. Peterson dug a trench away from the wellhead to keep his alfalfa from damage.
5/30/95: MM inspected the site, accompanied by Wayne Peterson. The flow was estimated at 10 gpm, and since the Inyan Kara and Sundance both exhibit artesian conditions in that area, it was possible the flow was emanating from either (or both) of those formations, travelling up the 5 1/2, 8 5/8 csg annulus.
6/1/95: FVS contacted Sam Clinton w/ Crystal Oil Co. Mr. Clinton assured FVS Crystal was a responsible co. and would fix the problem.
6/1/95: Pat Eddings (Crystal) called FVS and requested info from well files, which were faxed that day.
6/6/95: Received fax from Pat Eddings, Updike Brothers Well Service (Newcastle, WY), had been contracted to plug well.
8/22/95: Received fax from Ed Gibbs (Updike Bro.s) with Sundry of proposed P&A procedure.
8/24/95: MM called Ed Gibbs, approved P&A procedure. Ed said planning to move rig on-site the following week.
8/31/95: MM witnessed P&A (see procedure above).
9/11/95: Received Sundry from Ed Gibbs (Updike Bro.s) w/ P&A procedure. Aprroved by FVS.

OPERATOR'S TECHNICAL REPORTS / MAPS

CORE ANALYSIS RESULTS FOR

CRYSTAL OIL COMPANY

#1 PETERSON

WILDCAT

FALL RIVER COUNTY, SOUTH DAKOTA

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

CRYSTAL OIL COMPANY

#1 PETERSON
WILDCAT
FALL RIVER COUNTY

FORMATION : MINNELUSA
DRLG. FLUID: WATER BASE MUD
LOCATION : NE NE SEC 21 T7S-R1E
STATE : SOUTH DAKOTA

DATE : 3-19-79
FILE NO. : RP-4-5055-H
ANALYSTS : BOWEN
ELEVATION: 3533 GR

CONVENTIONAL CORE ANALYSIS

SAMP. NO.	DEPTH	PERM. TO AIR (MD) HORZ.	VERTICAL	POR. FLD.	FLUID SATS. OIL	WATER	GR. DNS.	DESCRIPTION
	2378-2385							ANHYDRITE-NO ANALYSIS
1	2385-86	0.02		3.0	14.5	80.0		DOL, LTBRN VFXLN
2	2386-87	0.03		2.9	15.4	77.2		DOL, LTBRN VFXLN
3	2387-88	0.05		2.1	19.6	68.5		DOL, LTBRN VFXLN
4	2388-89	0.08		1.6	24.8	49.6		SS, GY VFG
5	2389-90	0.08		1.7	11.8	47.2		SS, GY VFG
6	2390-91	0.08		2.0	41.8	31.3		SS, GY VFG
7	2391-92	0.08		2.2	27.9	46.5		SS, GY VFG CALC
8	2392-93	0.07		2.7	7.6	60.6		SS, GY VFG
9	2393-94	0.14		2.0	10.4	62.4		SS, GY VFG
10	2394-95	0.05		2.3	9.0	63.0		SS, GY VFG
11	2395-96	0.05		7.2	0.0	91.2		SS, LTGY FG
12	2396-97	0.06		8.2	2.5	87.9		SS, LTGY FG
13	2397-98	0.06		8.7	0.0	86.7		SS, LTGY FG
14	2398-99	6.1		11.3	15.5	65.5		SS, LTGY FG
15	2399 -0	0.18		11.0	5.5	76.4		SS, LTGY FG
16	2400 -1	13		30.5	16.8	48.3		SS, LTGY FG P/CMT _____ 28° API
17	2401 -2	977		24.9	21.1	40.0		SS, LTGY FG P/CMT
18	2402 -3	4.7		15.2	7.6	80.9		SS, LTGY FG
19	2403 -4	4.5		12.6	3.2	75.8		SS, LTGY FG
	2404-2406							SHALE-NO ANALYSIS
20	2406 -7	10		13.1	1.4	88.9		SS, LTGY VFG SL/CALC
21	2407 -8	98		21.6	0.9	94.2		SS, LTGY VFG
22	2408 -9	137		14.2	0.0	90.7		SS, LTGY VFG
23	2409-10	4.0		18.5	21.4	49.0		SS, LTGY FG _____ 34° API

VF = VERTICAL FRACTURE

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

CRYSTAL OIL COMPANY

#1 PETERSON
WILDCAT
FALL RIVER COUNTY

FORMATION : MINNELUSA
DRLG. FLUID: WATER BASE MUD
LOCATION : NE NE SEC 21 T7S-R1E
STATE : SOUTH DAKOTA

DATE : 3-19-79
FILE NO. : RP-4-5055-H
ANALYSTS : BOWEN
ELEVATION: 3533 GR

CONVENTIONAL CORE ANALYSIS

SAMP. NO.	DEPTH	PERM. TO AIR (MD) HORZ.	VERTICAL	POR. FLD.	FLUID SATS. OIL	WATER	GR. DNS.	DESCRIPTION
	2410-2417							LOST RECOVERY
24	2417-18	0.58		15.9	0.0	80.6		SS, LTGY FG
25	2418-19	18		17.8	0.0	71.3		SS, LTGY FG
26	2419-20	53		16.9	0.0	91.4		SS, LTGY FG
27	2420-21	69		15.9	0.0	89.7		SS, LTGY FG
28	2421-22	48		16.9	0.0	92.3		SS, LTGY FG
29	2422-23	0.08		2.7	0.0	81.4		SS, GY VFG ABNT/ANHY
30	2423-24	0.09		3.2	0.0	95.3		SS, GY VFG ABNT/ANHY
31	2424-25	0.08		2.5	0.0	88.0		SS, GY VFG
32	2425-26	0.17		3.1	0.0	78.7		SS, GY VFG
33	2426-27	0.08		2.8	0.0	86.1		SS, GY VFG
34	2427-28	0.13		2.4	0.0	91.7		SS, GY VFG
35	2428-29	0.08		3.8	0.0	97.4		SS, GY VFG
36	2429-30	0.05		4.2	0.0	92.7		SS, GY VFG
37	2430-31	0.07		2.7	0.0	92.4		SS, GY VFG
38	2431-32	0.02		2.9	0.0	91.7		SS, GY VFG
	2432-2434							SHALE-NO ANALYSIS

VF = VERTICAL FRACTURE

API ID 40 047 20074

CORE LABORATORIES, INC. *Petroleum Reservoir Engineering*

COMPANY CRYSTAL OIL FIELD WILDCAT FILE RP-4-5065

WELL #1 PETERSON COUNTY FALL RIVER DATE 3-19-79

LOCATION NE NE SEC 21 T7S-R1E STATE SOUTH DAKOTA ELEV. 3633 GR

CORE-GAMMA CORRELATION

VERTICAL SCALE 5" = 100'

CORE-GAMMA SURFACE LOG

GAMMA RAY

COREGRAPH

PERMEABILITY — MILLIDARCYS 1000 100 50 10 5 1

POROSITY — PERCENT 30 20 10

TOTAL WATER — PERCENT TOTAL WATER 80 60 40 20 0

OIL SATURATION — PERCENT PORE SPACE 0 20 40 60 80

2378

2406

2434

INTERPRETATION OF DATA

2386.0-2398.0 Feet - Non productive due to low permeability and porosity.

2398.0-2404.0 Feet - Oil productive characteristics-thin zone. Erratic oil saturations indicate high water cut could be expected.

2406.0-2432.0 Feet - Water productive where permeable.

These recovery estimates represent theoretical maximum values for solution gas and water drive. They assume that production is started at original reservoir pressure; i.e., no account is taken of production to date or of prior drainage to other areas. The effects of factors tending to reduce actual ultimate recovery, such as economic limits on oil production rates, gas-oil ratios, or water-oil ratios, have not been taken into account. Neither have factors been considered which may result in actual recovery intermediate between solution gas and complete water drive recoveries, such as gas cap expansion, gravity drainage, or partial water drive. Reliable predictions of ultimate oil recovery to specific abandonment conditions may be made in an engineering study in which consideration is given to overall reservoir characteristics and economic factors.

Gulf Oil Corporation

DAILY DRILLING REPORT

DATE: March 12, 1979 OPERATOR: Gulf Oil Corporation

WELL NAME AND LOCATION: #1 Peterson, T7S, R1E, Sec 21; NE¼NE¼, Fall River Co., SD

DEPTH: ~~337~~ 755'

BIT NUMBER: #1, Y12J, 7 7/8" Reed, drilled 750' with water, 5 hrs drilling cement & p

DRILLING MUD PROPERTIES: WT. _____ VIS. _____ PH _____ H_2O LOSS ___

SAMPLE TOPS:

REMARKS:

3-12

9 hrs - drilling new hole
8 hrs - nipple up
½ hrs - rig service
½ hrs - jetting pits
1 hrs - packing swivel

drilling 100 RPM's, 30,000 lbs weight, 54 strokes, 700 lbs pump pressure

35 total rotating hours
6 3/4 hrs - drilling
1 3/4 hrs - circultating
½ hrs - rig service
¼ hrs - rig up casing tools
½ hrs - running casing
3/4 hrs - cementing
13 hrs - waiting on cement and nipple up

survey at 255' with 1° deviation

ran 245' of 8 5/8" 24 lbs ST&C

set at 253' Kb

cemented with 250 sxs cement, 3% Calcium Chloride and 1% chip seal

Good returns

4 hrs - work on derrick
5 hrs - drilling mouse and rat hole
15 hrs - drilling 12¼ hole

survey at 100' - 1° deviation

drill 100 RPM's, 5½" liners, 14 x 54 strokes, 450 lbs pump pressure

Estimated spud date, March 1.

2-22-79 Grading location.

Expect to move in rotary tools by February 28.

Rig is currently under day work contract for the Federal Government at Phillip, South Dakota on a geothermal test.

March 2, 1979, 1:35 p.m.

Moved last load onto location this a.m.

Rig is on location and set in.

Shut down and recruiting crews.

When crews are hired, needed welding on derrick will begin.

Anticipate spudding Monday, March 5, 1979.

March 3, 1979 Hiring crews.

Crane or truck unavailable.

Anticipated spud date, Thursday, March 8, 1979

March 4, 1979 Hiring crews.

Crane or truck unavailable.

Anticipated spud date, Thursday, March 8, 1979

Working on derrick. Waiting on crane or truck to move derrick off of the floor.

Anticipated spud date March 8, 1979.

March 6, 1979

Working on derrick.

Anticipated spud date March 8, 1979.

March 7, 1979

Working on derrick.

Anticipated spud date March 8, 1979.

March 8, 1979

Derrick repaired and set up on drilling rig floor.

RURT

Should spud late this afternoon.

March 9, 1979

Mixed mud and prepared to spud yesterday but derrick would not scope up due to damage incurred in transit to location. Will continue to repair derrick today. If you have further questions, please feel free to contact Joe Banks, Telephone (307) 682-9354.

DRILLING REPORT

Crystal Oil Company
AFE #80883
Total Est Cost $
Crystal's Share $100,650

Peterson #1
Driftwood Prospect
Fall River County, S. Dakota

LOCATION: NE/4, NE/4, Sec. 21, T7S, R1E

PROPOSED TD: 2400'

CONTRACTOR:

ELEVATION:

3-10-79 TD 155', made 155', 1 day - - - This AM drilling - - - 4 hrs work on derrick, 5 hrs drill mouse & rathole, 15 hrs spud 12 1/4" hole. Survey 100', 1°.

3-11-79 TD 255', made 100', 2 days - - - This AM WOC & NU BOP's - - - 6 3/4 hrs drilling, 1 3/4 hrs circ, 1/4 hr rig service, 1/4 hr RU csg tools, 1 1/2 hrs run 8 5/8" 24# ST&C surface csg set at 253', cement w/250 sx + 3% CaCl + 1% chip seal, good returns, 3/4 hr cement, 13 hrs WOC & NU BOP's. Survey 255', 1°.

3-12-79 TD 750', made 495', 3 days - - - This AM drilling - - - drilling w/water - - - 5 hrs drill cement plug, 9 hrs drilling w/30,000#, 100 RPM, 700 pp, 8 hrs NU, 1 1/2 hrs rig service, 1 1/2 hrs jet pits, 1 hr pack swival - - - Bit #1, Y12J, in 255', made 495'.

Crystal Oil assume operation 3-13-79.

3-13-79 TD 1476', made 734', 4 days - - - This AM drilling - - - drilling w/water - - - 1 1/4 hrs rig service, 1 1/2 hr survey, 1/2 hr rig repair, 4 1/2 hrs trip, 17 1/4 hrs drilling w/25,000#, 100 RPM, 650 pp - - - Bit #1, 7 7/8", Y12J, in 255', out 816', made 561' in 11 hrs. Bit #2, 7 7/8", Y12J, in 816', made 660' in 14 1/2 hrs. Survey 816', 1°.

3-14-79 TD 1721', made 245', sh, 5 days - - - This AM mudding up - - - Mud 9.2, Vis 46, WL 6.3 - - - 14 3/4 hrs drilling w/30,000#, 80 RPM, 650 pp, 1 1/4 hrs rig repair, 4 3/4 hrs work stuck pipe, ream 120' to btm, 1/4 hr service rig, 3 hrs mudding up & circ - - - Bit #2, 7 7/8", Y12J, in 816', made 905' in 29 1/4 hrs.

3-15-79 TD 1944', made 223', sd & sh, Minnelusa, 6 days - - - This AM work on mud pump - - - Mud 8.8, Vis 38, WL 12.6 - - - 4 1/2 hrs trip (1 hr pull 1st 3 stds, tight spot, 1/2 hr washing down), 1/2 hr survey, 1 1/2 hrs circ & cond, 1/2 hr service rig, 13 3/4 hrs drilling w/30,000#, 50 RPM, 550 pp, 3 1/4 hrs rig repair, work on mud pump - - - Bit #2, 7 7/8", Y12J, in 816', out 1721', made 905' in 29 1/4 hrs. Bit #3, 7 7/8", FP-52, in 1721', made 223' in 13 3/4 hrs. Survey 1721', 1 1/4°.

3-16-79 TD 2177', made 233', sd & sh, 7 days - - - This AM drilling - - - Mud 8.7, Vis 53, WL 6.6 - - - 3 1/4 hrs rig repair, 3/4 hrs service rig, 1 1/2 hrs circ & cond mud, 18 1/2 hrs drilling w/30,000#, 50 RPM, 500 pp - - - Bit #3, 7 7/8 FP-52, in 1721', made 456' in 32 1/4 hrs. Cum cost $90,004.

3-17-79 TD 2288', made 109', sd & sh, 8 days - - - This AM drilling - - - Mud 10, Vis 64, WL 4.8 - - - 1 1/4 hrs service rig, 22 3/4 hrs drilling w/35,000#, 50 RPM, 600 pp - - - Bit #3, 7 7/8", FP-52, in 1721', made 565' in 55 hrs. Top of Red Marker 2270', Btm at 2278'. Cum cost $98,684.

POWERTECH (USA) INC.

DRILLING REPORT
(2)

CEPCO
AFE #80883
Total Est Cost $
Crystal's Share $100,650

Peterson #1
Driftwood Prospect
Fall River County, S. Dakota

3-18-79 TD 2378', made 92', sd & sh, 9 days - - - This AM trip to run core barrel - - - Mud 10, Vis 45, WL 4 - - - 21 3/4 hrs drilling w/35,000#, 50 RPM, 600 pp, 1/2 hr service rig, 1/4 hr rig repair, 1 1/2 hrs trip - - - Bit #3, 7 7/8", FP-52, in 1721', out 2378', made 657' in 76 3/4 hrs. Cum cost $107,429.

3-19-79 TD 2395', made 17', sh & Leo sd, 10 days - - - This AM WOO, lay down core barrel - - - Mud 9.9, Vis 43, WL 8 - - - 4 hrs reaming, 13 hrs coring 2378-95', 5 hrs trip, cut 17', 1/4 hr survey, 1/4 hr RU to TOOH w/core, 1 1/2 hr break out & lay down core, show of sd on btm 8 1/2', Leo sd 2386.5-95', light to med gray, very, very fine grain, hard anhy, poor porosity & permeability. Survey 2378', 1 1/2°.

3-20-79 TD 2395', made 0', Leo Sd, 11 days - - - This AM wash core barrel to btm - - - Mud 9.7, Vis 51, WL 7.6 - - - 11 3/4 hrs trip, 3/4 hr ream, 4 1/2 hrs PU DST tool, run DST test #1, 15 mins, surface bubbles only, close tool 30 mins, reopen tool 60 mins, surface bubbles only, blow died in 52 mins, CI for 60 mins, POOH, CI pressures were higher than hydrostatic, tool slid 5' to btm, CI press appears to be of no value, mud may have been by passed or pkrs compressed rathole mud during CI, interval tested 2386-95', surface ck 1/4", btm ck 15/16", rec 50' drilling mud, Cal 300 PPM

1st Period:	2nd Period:
IHH 1165#	IF ---
IF 17-23#	FF 23-0#
IFF ---	FCI ---
ICI ---	FHH 1121#

Test not valid, 2 hrs circ & cond mud, 1/2 hr service rig, 4 1/2 hrs WOO, PU 60' core barrel, RIH at 7 AM, wash core barrel to btm. Cum cost $124,415.

3-21-79 TD 2422', made 27', 2nd Leo Sd, 12 days - - - This AM lay down core - - - Mud 9.8, Vis 49, WL 5.8 - - - 3 1/2 hrs wash & ream 50' to btm, 1/2 hr circ & clean hole, 1 1/2 hr coring 2395-96', 1 hr go through pump, change fuel filters, 1/2 hr coring 2396-97', TOOH w/core #2 2395-97', 2 1/2 hrs TOOH & check core barrel, 1 1/2 hrs TIH w/core barrel, 1 1/2 hrs wash 4 jts to btm, 1 hr circ & cond mud, 3 hrs coring 2397-2422', 1/4 hr service rig, 2 1/2 hrs cond & circ mud, lay down kelly, 2 1/4 hrs TOOH w/core #3. Cum cost $133,060.

3-22-79 TD 2434', made 12', 2nd Leo Sd & sh, 13 days - - - This AM POOH w/core #4 - - - Mud 10.5, Vis 48, WL 14 - - - 1 hr lay down core #3, cut 25', rec 18', 1 1/4 hrs WOO, 1/2 hr TIH to ream & cond core hole, 1 hr reaming core hole, 1 1/2 hrs circ & cond hole for core #4, 2 1/4 hrs TOOH, 1/2 hr service rig, 1/2 hr PU core barrel, 2 hrs TIH w/core barrel, 2 hrs reaming & circ, 8 1/2 hrs coring, 2422-34', 12', 1/4 hr service rig, 2 3/4 hrs circ & cond mud. Cum cost $140,660.

3-23-79 TD 2500', made 66', sd, sh & dolomite, 14 days - - - This AM circ & cond to log - - - Mud 9.8, Vis 45, WL 8 - - - 2 1/2 hrs TOOH w/core #4, 2422-34', cut 12', 2 hrs lay down core & core barrel, rec 12', 1/2 hr service rig, 2 hrs TIH w/bit, 1/2 hr ream, 3/4 hr service rig, 14 1/2 hrs drilling, 1 1/4 hr circ & cond mud to log - - - Bit #3, 7 7/8", FP-52, RR, made 66' in 14 1/2 hrs. Cum cost $150,653.

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DRILLING REPORT
(3)

CEPCO
AFE #80883
Total Est Cost $
Crystal's Share $100,650

Peterson #1
Driftwood Prospect
Fall River County, S. Dakota

3-24-79 TD 2500', made 0', 15 days - - - This AM circ, prep to run csg - - - Mud 9.9, Vis 49 - - - 1/2 hr circ to log, 1/4 hr survey, 1 3/4 hrs TOOH to log, 10 hrs logging, Schlumberger ran DILL-SFL, bore hole compensated, sonic & dip meter, Schlumberger's TD 2499', driller's TD 2500', 1 1/2 hr TIH to circ, 11 hrs circ, WO csg. Survey 2500', 2°. Cum cost $162,326.

3-25-79 TD 2500', made 0', 16 days - - - This AM WOC - - - 1 1/2 hr circ, WO csg, 3 1/2 hrs lay down kelly, DP, collars, RU csg crew, 3 hrs run 71 jts 5 1/2" 14# K-55 R-2 ST&C csg, test to 4300#, total 2503.94', land csg at 2499', PBD 2466', 3/4 hr RU Howco to cement, cement w/10 BW, 500 gals mud flush, 200 sx Class "G" cement, 3% KCL, .75% CFR-2, .4% Halad 22-A, .25 D-Air, displace w/61.13 2% KCL water, bump plug w/2000#, held 5 mins OK, plug down at 3:45 PM, broke out Howco, break down Hydril to set slips, 7 1/4 hrs well had strong water flow out csg, CI csg head, RD Howco, release rig at 11 PM, 3-24-79, 8 hrs WOC. Cum cost $174,208.

TD 2500', PBD 2466'.

3-26-79 24 hrs, waiting to move rig off location. Cum cost $174,208.

3-27-79 RD & MO rig, WO completion rig. Cum cost $174,208.

3-28-79 WO completion rig. Cum cost $174,208.

3-29-79 11 hrs MI & RU Eatmon Rig #12 from Kimball, NB. Plan to run CBL & perforate today. Cum Cost $186,208.

3-30-79 11 hrs, Schlumberger ran CBL-VDL-GR from 2450-1400', good bond to top of cement at 1530', found PBD at 2460', Howco press tested csg to 2500#, held OK, TIH w/4" csg gun, [redacted]-2400', 4/SPF, FL at surface after perf, RIH w/tbg as follows:

Tbg breakdown:

6.00'		KB
2342.51'	75 jts	2 7/8", 6.4# J-55 tbg
1.12'		1 - SN
2349.63'	75 jts	

RIH w/swab, FL at surface, swab 3 hrs, rec 53 BLW, pulling from SN, fluid 100% load water, no gas, last run FL 100' above SN, 13 hrs CIFN. This AM CITP 5#, FL 1900', rec 300' dirty, brackish water, prep to acidize. Cum cost $196,240.

TD 2500', PBD 2460', 5 1/2" csg perfs 2399-2400'.

3-31-79 11 hrs, CITP 5#, CICP 5#, FL 1900', Halliburton acidized perfs 2399-2400' as follows: load hole w/36 bbls 2% KCL water, circ 12 bbls 15% HCL + 1%, displace w/3 bbls 2% KCL, CI csg w/1 bbl of acid across perfs, start pump on acid, break down formation at 600# at 1 BPM, 400# pp w/6 bbls of acid pump, SD, let acid soak 10 mins, press dropped to 0#, pump final 6 bbls acid at 2 BPM, 700# pp, overdisplace 1 bbl, ISIP 600#, 15 min 100#, RIH w/swab, FL at surface, swab 8 hrs, rec 157 bbls 100% water, swabbing from SN w/FL maintaining 400', average 19 BW per hr feed in after load rec, 13 hrs CIFN. This AM CITP 50#, CICP 50#, FL 200' from surface, bled off air (no gas) (no hydrocarbons). Cum cost $201,218.

DRILLING REPORT
(4)

CEPCO
AFE #80883
Total Est Cost $
Crystal's Share $100,650

Peterson #1
Driftwood Prospect
Fall River County, S. Dakota

TD 2500', PBD 2460'.

4-1-79 10 hrs, CITP 50#, CICP 50#, bled off air (no gas), FL 200' from surface, fluid sample indicated 100% water, TOOH w/tbg, MU & TIH w/pkr & tbg, set pkr at 2290.53', WO Halliburton 4 hrs, mix & pump 25 sx Class "G" w/Halad 22-A, 75 sx Class "G" regular, 20 bbls slurry, sq perfs 2399-2400' at 2 BPM, 600# pp w/4 bbls in perfs, press increased to 1500#, reduce rate slowly from 2 BPM to 0 w/8 bbls in perfs, cement locked up, held 1500# on well for 30 mins w/ min bleed off, rev out cement, press up to 1500#, held 5 min, OK, POOH w/ tbg, 14 hrs CIFN. This AM WOC. Cum cost $208,452.

4-2-79 24 hrs WOC. This AM drill out cement sq. Cum cost $208,452.

4-3-79 11 hrs, MU & TIH w/4 3/4" bit & scraper, 2 7/8" tbg, tag cement at 2348', RU power swival, rev circ equip, drill 50' cement, circ hole clean, test sq to 1500#, held OK, MU & TIH w/pkr, set at 2350', swab dry in 2 runs, no fluid entry, 13 hrs CIFN. This AM TOOH w/pkr, prep to perf 2400-02'. Cum cost $210,442.

4-4-79 10 hrs, TP 0#, CP 0#, FL 2350', no fluid feed in, POOH w/tbg & pkr, RU Goodwill & perf 2400-02', 4/SPF, made 7 holes w/4" csg gun, 1 shot did not fire, found PBD 2424', RD Good will, TIH w/tbg & pkr as follows:

Tbg breakdown:

6.00'		KB
2342.51'	75 jts	2 7/8" 6.4# J-55 tbg
1.12'		1 - SN
3.50'		1 - Baker Model "R" pkr
2353.13'	75 jts	

RU swab, swab well dry in 2 runs, made 1 run every 30 mins to 1 hr, rec 100' fluid per run, 100% water, no gas, cont to swab while WO Goodwill to reperf, made 2 BW in 3 hrs swabbing, RU Goodwill, TIH w/ 1 11/16" through tbg gun, FL 200' above SN, perf 2400-02' w/9 holes, RD Goodwill, GIH w/ swab, found FL 200' above SN, swab dry, made 1 run every 30 mins, rec 50-100' fluid per run, 100% water, 14 hrs CIFN, rec 3 BW in 5 hrs swabbing. This AM opened tbg w/slight blow, no gas, CP 0#, FL 1000' from surface, 100% water, swab down in 1 run, FL maintaining 100' above SN, making 1 run every 30 mins. Cum cost $213,732.

DRILLING REPORT
(5)

CEPCO
AFE #80883
Total Est Cost $
Crystal's Share $100,650

Peterson #1
Driftwood Prospect
Fall River County, S. Dakota

TD 2500', PBD 2460', 5 1/2" csg perfs 2400-02'.

4-7-79 12 hrs, work, 3 hrs WO Halliburton, RU, pump plug from 2424-2274' w/16 sx 50-50 Poz mix, lay down tbg, pump plug from 290-210' w/8 sx 50-50 Poz mix, filled top of 5 1/2" csg w/15' cement, pumped 10 sx cement into surface csg, RD Halliburton, RD Eatmon rig, load out pipe & clean up location.

P & A

FINAL REPORT

20

ADMINISTRATIVE / SUNDRY REPORTS

POWERTECH (USA) INC.

API ID 40 047 20074

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: September 30, 1990

SUNDRY NOTICES AND REPORT ON WELLS

5. Lease Designation and Serial No.

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE

7. If Unit or CA, Agreement Designation

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
Peterson #1

2. Name of Operator
Crystal Oil Company

9. API Well No.
40-047-20074

3. Address and Telephone No.
P.O. Box 21101, Shreveport, LA 71120 800-231-4814

10. Field and Pool, or Exploratory Area
Wildcat

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
NENE Sect. 21, T7S R1E
660' FNL & 758' FEL

11. County or Parish, State
Fall River, SD

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☒ Abandonment	☐ Change of Plans
☒ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☐ Other	

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

8-31-95

Found fresh water leak to be in 5 ½" csg.
Tagged T.D. at 1800' with sand line.
Welded a seal between 5½" and 8 5/8" with an outlet in 8 5/8"
Pump 50 sx class G. cement down 8 5/8" and shut in.
Pump 50 sx cement in 5½" from 370' to surface.
Cemment settled inside 5½"
Filled 5½" back up with 20 sx
Cement settled
Wait 1 hour and filled 5½" back up with 24 sx.
Cement settled slowly.
Wait 3 hours and filled 5½" back up with 32 sx.
5½ and 8 5/8 stayed full.
Welded a cap over the 8 5/8"
Filled in holes and ditches and leveled location up.

RECEIVED
SEP 11 1995
OIL & GAS PROGRAM

14. I hereby certify that the foregoing is true and correct

Signed Edward Sibbs Title Foreman Date 9-7-95

(This space for Federal or State office use)

Approved by Fred Steece Title Field Operations Supervisor Date SEP 11 1995

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

SUNDRY NOTICES AND REPORT ON WELLS

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: September 30, 1990

5. Lease Designation and Serial No.

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE

7. If Unit or CA, Agreement Designation

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
Peterson #1

2. Name of Operator
Crystal Oil Company

9. API Well No.
40-047-20074

3. Address and Telephone No.
P.O. Box 21101, Shreveport, LA 71120 800-231-4814

10. Field and Pool, or Exploratory Area
Wildcat

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
NENE Sect. 21. T7S R1E
660' FNL & 658' FEL

11. County or Parish, State
Fall River, SD

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	☐ Other	

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Repair a fresh water leak at the surface of the well which had been plugged on 4-6-79.

RIH with Tubing and Tag cement plug at 210'-290'
If the plug is still there and is not leaking then perforate at 275' and set a cement retainer at 210' and squeeze the 8 5/8 with 100 sx of class G cement.
Put a 15 sx plug at surface of 5 ½.
If the cement plug is not found at 210'-290' then replace it with 35 sx cement and 15 sx at surface of 5 ½ plus pump 50 sx cement down the surface pipe.

14. I hereby certify that the foregoing is true and correct
Signed Edward Gibbs Title Foreman UBI Date 8-22-95

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:

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*See Instruction on Reverse Side