

RECEIVED

MAR 11 1970

COLO. OIL & GAS CONS. COMM.	
35	

OPERATOR: Continental Energy Corporation

WELL: 1 Penrose FIELD: Powell Park

 Location: 15' from N Line; 1846' from W Line
 Section 35, T. 1N, R. 95W, COUNTY: Rio Blanco
 Elev. 6051 grd; 6062 r. t. STATE: Colorado

Contractor: DREILING DRILLING INC. TD 5830' PB 1898

Casing Record: 8-5/8" @ 263' CMT'D W/165 SACKS

4 1/2" 10# CSG. @ 5820 RDB CMT'D W/150 SACKS

 Perforations: 35 HOLES - 5613 TO 30, 18 HOLES - 1928 TO 36,
 32 HOLES - 1824 TO 32 & 1837 TO 43.

Remarks: Lot Coordinates:

794' West of SW Corner Tract 52

15' South of N Line Tract 74

 Completion: 75 b/d oil
 50 BW 40 % water

Prod. Frm.: WASATCH

Date	Depth	Progress Report	Formation Tops	Sch.	Samples
11/25/69		Staked location	CHARLIE SD.	4338	
12/6/69		Grading loc @ site 715' W & 75' S of SW Corner Tract 52, found water & soft subsoil	MESAVERDE	5248 (WM'S. FORK)	
			ALMOND MBR.	5299	
12/7/69		Moved Loc. NW to 794' West & 15' South of SW Corner Tract 52	LOWER ALMOND MBR.	5649	
12/8/69		Grading location	WASATCH	SURFACE TO 4338	
12/10/69		Moving in Rotary tools anticipate spudding on 12/12/69	FT. UNION (?)	4338 TO 5248	
			MESAVERDE	5248 TO T.D.	
12/14/69		Spud at 7 a.m.			
12/15/69	270	T.D. 270' W.O.C. RAN 250' OF 8 5/8", 24#, J-55, csg. set at 263' cmt'd with 165 sacks, 2% CaCl, circulated to surface. Plug down @ 3a.m.			
12-16-69		OUT FROM UNDER SURFACE 5:30 A.M.			
12-17-69	1700'	DRILLING, DEV. 1 1/2" O.			
12-18-69	2720	DRILLING, DEV. 2 1/2" O @ 2548, MUD WT. 9.0, VIS. 35, W. L. 3.2, SHOW GAS ON LOGGER AFTER EACH CONNECTION, 60 UNIT KICK (GAS LOG MAILED 12/17/69)			
12-20-69	3674	DRILLING GRAY SDY SH, NEW BIT AT 3525', DEV. 3 1/2" O @ 3525' DRLG. 1 1/2" TO 3 MIN/FT. LITHOLOGY GRAY-WHITE TO WHITE S&P FRIABLE SAND, SL. CALC. POORLY SORTED, NO SHOWS, NO FLUOR. OR CUT, VARICOLORED BRN, GREY LAVENDER SHALE. MUD LOG-35 UNITS BACKGROUND, SHOWING GAS AT CONNECTIONS, 200 UNITS TRIP GAS @ 3525. 3535-48, 225 UNITS GAS, 21,600 PPM METHANO, 33,000 ETH, 1170 PROP., 1120 BUT. ADDED 10 BBL. DEISEL OIL-10 UNIT INCREASE IN BACKGROUND TO 45 UNITS. MUD-WT. 8.8#, VISC. 37, WTR. LOSS 6.0 THIN CAKE PH 7			
12-21-69	4078	S.D. REPAIR LIGHT PLANT-WENT OUT AT DEPTH 4068-NO POWER FOR LOGGING UNIT OR SHALE SHAKER.			
12-22-69	4182	DRILLED SHALE 4050-4100, TRIP 4089', CIRC. 4182' OIL SHO, "C" SAND (CHARLIE) SS, WH, S&P, F-M G, SOME CRS. GR CLEAN, MOD CEM, SL CALC W/ABUND UNCOL GRS-ORANGE SPECKS, YELLOW-GRN FLOUR-SLOW YEL. CUT, 4138-57 DRILLED 1"-1 1/2"/FT (19'), 4157-68 DRILLED 3"-4"/FT (11'), 4168-82 DRILLED 1"-1 1/2"/FT (14'), 35 UNITS-6,400 PPM METH, 460 E, 260 P, TR. B, NO GAS INC. OVER 35 UNIT BACKGROUND			
12-23-69	4448'	DST #1 4138-98' OP 15" ISIP 30" OP 60" SIP 30" 1 OPEN W/WEAK BLOW - 3" BUCKET INC. TO GOOD (7"), 2ND OP TOOL OPENED W/WEAK BLOW IN TO GOOD 11" BOTTOM BUCKET. HP 1977-1960#, FP 54-554#, SIP 1812-1725#, TEMP 97° REC. 925' MUD CUT WATER. PLAN TO ENTER & DRILL AHEAD.			
12-24-69	4784'	TD DRILLING AHEAD, 4456' NEW BIT #11, DEV. 4" O, MUD 8.9#, VISC 38, WL 5.2cc 1/32 CAKE - 8 PH, DRILLING RATE 4-5"/FT EXCEPT BREAKS, 40 UNIT BACKGROUND- 125 UNITS KICK, M-3600-36000, E-400-1400, P 130-260, 4744-58 1-1 1/2"/FT (CARB. STREAK 4744), 35 UNITS 10" SH, 4768-84 1-1 1/2"/FT, LT & DARK GUMBO SHS, SS, LT GRY, P. SORT, BENT, SL CALC, VF-FG, SS, CONSOL. BIT BALLING			



(OVER)

Date	Depth		OTHER INFORMATION
12-25-69	5085'		UP, @ 4500-15 GUMBO SH, 4645-50 GUMBO SH, UNITS APPEAR THINNER. DRILLING, NEW BIT 4816, DEV. 3-3/4" @ 4816, LITE S DRK GRY SH-COAL PARTINGS UNCON. F-G SS & SOME W/WT FRIAL BENT, CARB SS, DRILLING 5-6"/FT M 9.24 - 38 VISC - WL 4.6 - 1/32 CAKE, 8 PH, TRIP 4816-GAS 175 UNITS DEC. TO 25 UNIT BACKGROUND, M 3600 PPM - E 230 PPM P 50 PPM, NO ZONES OF INTEREST, TWO COAT KICKS - M MAINLY.
12/26/69	5288'		DRILLING AHEAD, NEW BIT 5088, DEV. 3 1/2" DRILLING RATE 4"/FT, M 9.3#, VISC. 38, WL 4.8, 1/32 CAKE - 8 PH, TRIP GAS 5246-210 UNITS, 40,000 PPM M 1610 E, 650 P, 500 B, NO DIESEL FOR LAST TWO DAYS, BACKGROUND 60 UNITS, 6000 PPM M, 690 E, 260 P, DRILLING BENTIC SS, GRY-WH, VF-MG, POOR SORT, FRIAB W/ABUND UNCAL GRN (NS OF OIL FLUOR OR CUT) TR, COAL, SH, DRK GRY CARB. CIRC, 20' BREAK 5150' (5130-5156 SS) NS SOFT AND GUMMY NO GAS KICK, SS-5230-42 (NO GAS KICK) HAVE LOGGER SCHLUMBERGER ON LOCATION AT NOON.
12/27/69	5570'		ON BOTTOM WITH NEW BIT #15 DEV. 2-3/4" @ 5570.
12/28/69	5779'		TRIP IN HOLE W/BIT #16, DEV. 2-3/4" @ 5779', MUD WT. 9.3, VISC. 42, W.L. 4.8, PH 8. GAS SHOW IN SAND 5608-43, 175 UNITS, BLUISH YELLOW FLUOR, THRUOUT SAND ZONE.
12/29/69	5830	TD	PICKING UP DST TOOL, RAN SCHL. IES & BHC SN-GR. LOGS SCHL. T.D. 5834'
12/30/69	5830	TD	S.D. WAITING ON ORDERS, DST #2 5615-5634, STRADDLE PACKER TEST. OPEN 15 MIN., SI 30 MIN, OPEN 60 MIN., SI 120 MIN, FIRST OPEN FAIR TO STRONG BLOW. REC. 510' OCM; H.P. 2162#, 2173#, F.P. 69#-168#, S.I.P. 1194#-1960# B.H. TEMP. 120°.
12/31/69	5830	TD	CONDITIONING HOLE & PREPARING TO RUN 4 1/2" CASING.
1/1/70	5830	TD	W.O.C. RAN 178 JOINTS 4 1/2", 10 1/2# CASING SET AT 5820', CEMENTED WITH 150 SACKS, (100 SX 50-50 POZMIX, 2% GEL. & 50 SX REGULAR) PLUG DOWN @ 6 A.M. 1/1/70 (HALLIBURTON)
1/2/70	5830	TD	TOP OF PLUG @ 5784', GOOD CMT. FILL UP TO 5250-5300' RIG RELEASED @ 12. NOON 1/1/70. Operations suspended pending completion planning.
1/2/70			B. W. Allen Co, handling well completion Moving in Roberts well service rig.
1/28/70	5830	TD	RAN CEMENT BOND LOG P.B. T.D. 5773, TOP GOOD (EXCELLENT) CMT. @ 5180', SCATTERED TO 4650' MOVING IN COMPLETION RIG TODAY.
1/29/70			Loc very soft due to thaw, D-8 Cat required to aid rigging up. Purchased 8" X 8" ties to shore up rig. Installed & tested blow-out preventer, working O.K. Perf. 5613 to 5630, 2 shots/foot, 35 holes. To run tubing on 1/30/70 & swab natural, will acidize & swab back on 1/31/70
1/30/70			RAN BAKER RETRIEVABLE PACKER ON 2-7/8" TUBING, SET PACKER @ 5545 W/TAI PIPE TO 5575, SWAB DRY.
1/31/70			BLEW 15 MIN. & FILLUP 350' WATER OVERNITE, ACID W/1000 GAL. MUD ACID W/15% ISOPROPYL ALCOHOL, RAN 35 - 7/8" BALL SEALERS, BROKE @ 3000# BROKE BACK TO 1450# - 2 BBL/MIN, PRESS & RATE REMAINED CONSTANT, NO BALL ACTION. INSTANT P. SI 1200#, 5 MIN. P. 800#, SWAB DRY @ 1 P.M., @ 2:00 P.M. REC. 300' FLUID, 3:00 NO FLUID SLIGHT GAS BLOW, SI, 4:00 P.M. GOOD BLOW DIED, FLUID @ 4000' GAS POCKETS, SWAB FROM 200' OFF BOTTOM SI 4:30-5:30 P.M., @ 5:30 GOOD BLOW DIED, 200' FLUID SOME ACID WATER.
2/1/70			SWAB EACH HOUR 8 AM TO NOON-FLAMABLE GAS 300' FLUID IN HOLE AT START 150' FL. AT NOON, MAKING SMALL AMOUNT GAS, NOT MEASURABLE.
2/2/70			SWAB EACH HOUR (MONDAY 2/2/70) SET TANKS FOR DIESEL FRAC.
2/3/70			SIP 250# OVERNITE FLARED GAS-ORANGE FLAME, FLUID LEVEL @ 2600' SWABBED DOWN, 100-150 FLUID/HR, LOADED HOLE WITH DIESEL, DOWELL HOOKING UP TO FRAC LATER TODAY. THEY HAVE WATER SAMPLE TO CHECK FOR FM. FLUID CHARACTERISTIC & RESIST.
2/4/70			FRAC W/20,000 GAL. DIESEL, 20,000# 20-40 SAND, 24 BBL/MIN, @ 3500# 2300# INSTANT P., 2100# IN 10 MIN., SI @ 5:30 2/3/70.
2/5/70			7:30 A.M. 2/4/70 WELL HEAD 1000#, VALVE IN WELL HEAD LEAKED DIESEL OIL AROUND WELL SITE OVERNITE, FLOWED DIESEL FRAC OIL INTO PITS FOR 2 1/2 HRS., WELL DIED, SET 15 MIN., BEGAN RUNNING TUBING WELL KICKING DIESEL WITH GAS, WITH 8 STANDS (500') TUBING IN HOLE, WELL BLEW DIESEL 40' INTO AIR, CAPPED TUBING & CLOSED RAMS ON B.O.P. FLOWED DIESEL & HEADS OF

PENROSE #1-POWELL PARK, COLORADO



Date	Depth	OTHER INFORMATION
		GAS INTO PIT. S.I. @ 5 P.M. NO ESTIMATE OF DIESEL LOAD RECOVERED.
		TO CONTINUE FLOWING DIESEL LOAD OIL TODAY AND RUN TUBING TO TEST.
2/6/70	5830 TD	400# S.I.P. @ 7:30 A.M. 2/5/70. RAN TUBING WITH PACKER SET @ 5545#, SWAB BELOW 2500', 4:30 TO 6:00 P.M. FLOW BY HEADS-DIESEL, DISTILLATE AND SOME WATER, EST. GAS AT $\frac{1}{2}$ MMC FT. THIS A.M. ATTEMPTING TO LOCATE SEPARATOR TO ENABLE REMOVAL & MEASUREMENT OF LIQUID & GAS COMPONENTS. TO OBTAIN FLUID SAMPLE TODAY AND DETERMINE DISTILLATE FRACTION BY DISTILLATION.
2/7/70		S.I. OVERNITE S.I.P. 500# @ 6:30 A.M. 2/6/70, FLUID LEVEL 1800', UNABLE TO SWAB DOWN BELOW 4000'. S.I. 15 MIN. SIP 500#. DIESEL FRAC FLUID ALL RECOVERED. SAMPLE OF GRAY-GREEN EMULSION OF WATER, OIL & DIESEL COLLECTED & SENT IN TO CHEM. & GEOL. LAB. FOR ANALYSIS. 7 P.M. 2/6/70.
2/8/70		200# S.I.P. @ 7 A.M. 2/7/70, FLUID LEVEL 1200' UNABLE TO SWAB BELOW 3000', WATER WITH TRACE (SLIGHT AMOUNT) DIESEL & FRAC FLUID; SWAB 20-30 BBL WATER/HR ALL DAY, VERY LITTLE GAS. WILL SAMPLE WATER AND GET RESISTIVITY VALUE TODAY.
2/9/70		FLUID LEVEL 1200', SWAB DOWN TO 3000', 90% WTR, 10% DIESEL, SWAB 25-30 BBL FL/HR. WATER ANALYSIS TEST #1 RW 1.94 @ 53° F. TEST #2 RW 1.90 @ 53° F.
2/10/70		TO REVIEW DATA AND MAKE DECISION ON TESTING OF UPPER SAND ZONES. PLAN IS TO 1) CUT PIPE AT APPROXIMATELY 4500', 2) PULL TO APPROXIMATELY 2350' AND RE-CEMENT, 3) PERFORATE SANDS IN INTERVAL 1745 TO 1960'. ENGINEER ARRANGING PROGRAM TO EFFECT SAME.
2/11/70		LOADING HOLE WITH SALT WATER & PREPARING TO CUT OFF CASING.
2/12/70		LOADED HOLE WITH 9.4# SALT WATER, PULLED TUBING, OPENED VALVE IN ANNULUS BETWEEN SURFACE CASING AND 4 $\frac{1}{2}$ " CASING, STRONG BLOW OF GAS, NO GAUGE TO OBTAIN PRESSURE OR VOLUME. CLOSED VALVE. TO RUN STATIC TEMP, TRAVERSE, THEN FLOW GAS AND RERUN TEMP. TRAVERSE TO FIND SOURCE OF GAS; WILL THEN PERF, CASING W/4 HOLES AT 4600' & CIRCULATE FLUID, FILLING ANNULUS BETWEEN CASING STRINGS AND KILLING GAS FLOW; CUT CASING & PULL TO RESET & CEMENT.
2/13/70		CUT 4 $\frac{1}{2}$ " CASING @ 4190', RAN TEMP. SURVEYS-NO INDICATION OF SOURCE OF GAS IN ANNULUS. PULLED CASING TO 2620' (1570' OF PIPE PULLED) SET PLUGS AS FOLLOWS: CAST IRON BRIDGE PLUG AT 5600', 40 SACKS - 4190 TO 4115, 30 SACKS - 3080 TO 3000, 30 SACKS - 2500 TO 2425.
2/14/70	2620 PBTD	WAITING ON CEMENT PLUG TO SET BEFORE RECEMENTING 4 $\frac{1}{2}$ " CASING. PIPE PLUGGED. UNABLE TO CIRCULATE, PERF. 4 HOLES 2278-2279.
2/15/70		CEMENTED 4 $\frac{1}{2}$ " CASING WITH 470 SACKS, 2% CAOL, W.O.C.
2/16/70		W.O.C. REGRADING SOFT LOCATION-WILL RUN BOND LOG & RUN TUBING & SWAB DOWN TOMORROW PREPARATORY TO PERFORATING & TESTING 3 ZONES 1928-1936, 1824-1843 AND 1755-1764.
2/17/70		WOC
2/18/70	2185 PBTD	REMOVED BOP, INSTALLED PACKING IN CASING HEAD, CHANGED PIPE RAMS FROM 4 $\frac{1}{2}$ " TO 2-7/8", RAN GR CORRELATION LOG WITH COLLAR LOCATER, RAN CORRELATION LOG TO 1500', RAN CEMENT BOND LOG 2185 TO 1350', TOP OF CEMENT @ 1800', BONDED DOWN THRU 1970, LOOSE BOND BELOW 1970. SET BRIDGE PLUG @ 2054' (BAKER RETRIEVABLE), FULL BORE TENSION PACKER @ 1886', SWAB DOWN TO 1000'. PERF. 1928-1936, 2 HOLES/FOOT, SWAB DRY IN 2 RUNS, FILL UP 50' EACH 30 MIN, APPEARS TO HAVE WHIFF OF GAS. PLAN TO SWAB TEST TILL NOON 2/18 THEN PERF. 1824-32 & 1837-43 WITH BRIDGE PLUG RAISED TO 1900'.
2/19/70	2185 PBTD	FILLUP 100' FLUID OVERNITE, SWAB DOWN, NO SHOWS. SWAB DRY RESET BRIDGE PLUG @ 1905 W/PACKER @ 1694' PERF. 1824-32, 1837-43, SWAB LOAD 2 P.M. TO 4 P.M., BEGAN MAKING OIL FROM 4 TO 6 P.M. SWAB 1 $\frac{1}{2}$ BBL OIL/HR WITH TRACE OF WATER-GREEN OIL EST 38°-40° API HIGH PARAFFIN. TO SWAB INTO TANK & GAUGE PRODUCTION TODAY. WILL HAVE DOWELL TAKE SAMPLE FOR COMPATIBILITY TEST & ANALYSIS. TAYLOR CORRELATES SAND AS EQUIVALENT TO "G" SAND OF WASATCH, PRODUCTIVE AT PICEANCE CREEK (GAS & CONDENSATE)
2/20/70	2185 PBTD	THP 100# @ 7 AM 2/19, FLUID LEVEL 1400' SWABBED INTO TANK, GAUGED 2 BBL OIL + 5 BBL WATR 1ST 4/HR, SWABBED TOTAL 10 $\frac{1}{2}$ HRS 7 AM TO 5:30 PM 9 BO + 6 B WTR 60% OIL. OIL IS LIVE & GASSY.



CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 279

Casper, Wyoming

WATER ANALYSIS REPORT

OPERATOR Continental Energy Corporation DATE February 2, 1970 LAB NO. 3235
 WELL NO. No. 1 Penrose LOCATION NE NW 35-1N-95W
 FIELD Wildcat FORMATION Mesaverde
 COUNTY Rio Blanco INTERVAL 5613-5630
 STATE Colorado SAMPLE FROM Swabbing (2-6-70)

REMARKS & CONCLUSIONS: Muddy water; clear filtrate.

We are unable to make definite correlation at this time. Cretaceous characteristics are present, however, and this may be Mesaverde water.

Cations			Anions		
	mg/l	meq/l		mg/l	meq/l
Sodium	1958	85.16	Sulfate	441	9.17
Potassium	34	0.87	Chloride	1640	46.25
Lithium	-	-	Carbonate	-	-
Calcium	135	6.74	Bicarbonate	2538	41.62
Magnesium	52	4.27	Hydroxide	-	-
Iron	absent	-	Hydrogen sulfide	absent	-
Total Cations		97.04	Total Anions		97.04

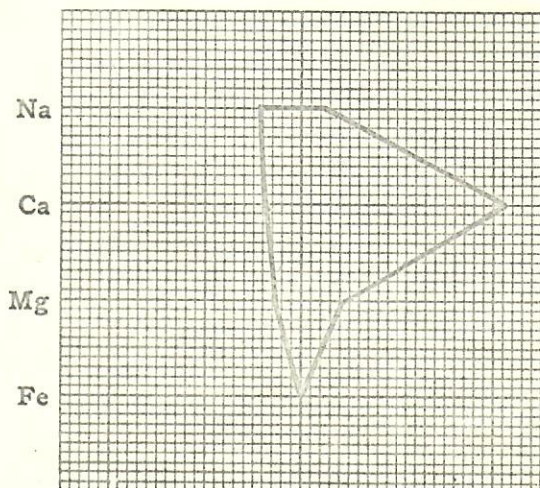
Total dissolved solids, mg/l 5510
 NaCl equivalent, mg/l 4770
 Observed pH 8.0

Specific resistance @ 68°F.:

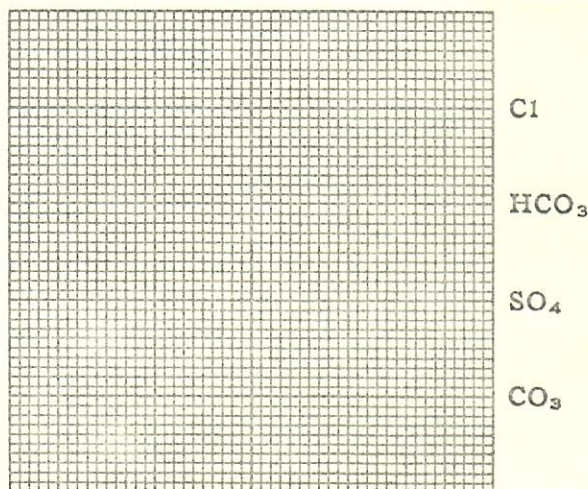
Observed 1.30 ohm-meters
 Calculated 1.32 ohm-meters

WATER ANALYSIS PATTERN

Sample above described Scale
 MEQ per Unit



Cl 20
HCO₃ 2
SO₄ 2
CO₃ 2



(Na value in above graphs includes Na, K, and Li)

NOTE: Mg/l=Milligrams per liter Meq/l= Milligram equivalents per liter

Sodium chloride equivalent=by Dunlap & Hawthorne calculation from components

CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 279
Casper, Wyoming

CRUDE OIL ANALYSIS REPORT

Company Continental Energy Corporation Date February 10, 1970 Lab. No. 3235
Well No. No. 1 Penrose Location NE NW 35-1N-95W
Field Wildcat Formation Mesaverde
County Rio Blanco Depth 5613-5630
State Colorado Analyzed by C. E. Davis
Swabbing 2-6-70

GENERAL CHARACTERISTICS

Specific gravity @ 60/60 °F. 0.8524
A.P.I. gravity @ 60 °F. 34.2
Saybolt Universal Viscosity @ 70°F., seconds
Saybolt Universal Viscosity @ 100°F., seconds
B. s. and water, % by volume 12% H₂O; 3% mud
Pour point, °F.
Total sulphur, % by weight

REMARKS: Overall sample approximately 50% water.

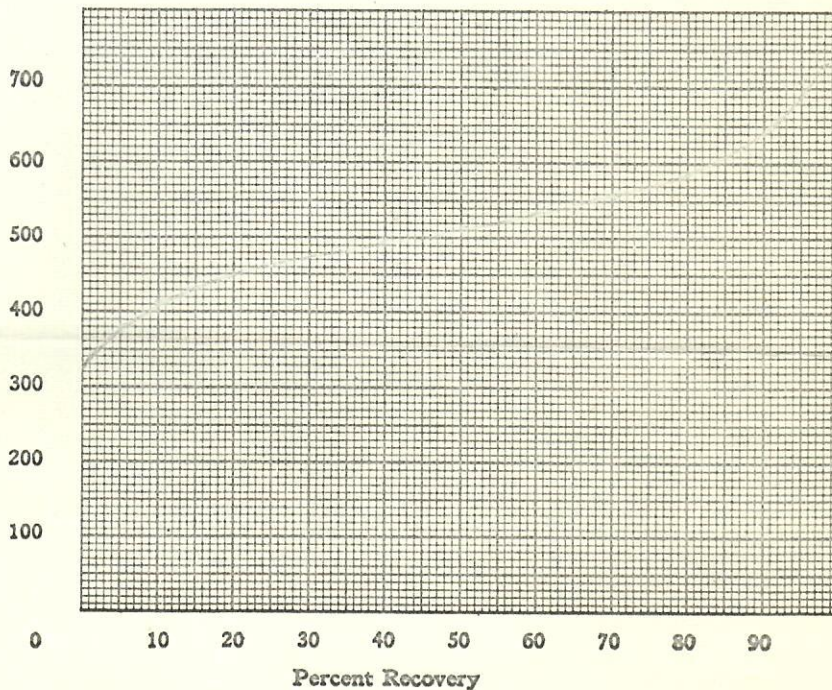
Distillation characteristics indicate this is 95+% diesel fuel.

ENGLER DISTILLATION

Recovery, %	Temperature, °F.
IBP	325
5	380
10	414
15	
20	450
25	
30	476
35	
40	495
45	
50	514
55	
60	535
65	
70	555
75	
80	583
85	
90	640
95	710
E.P.	728

Recovery, % 98.0
Residue, % 2.0
Loss, % 0

DISTILLATION GRAPH



Approximate Recovery

300 EP gasoline, %
392 EP gasoline, %
500 EP distillate, %

CHEMICAL & GEOLOGICAL LABORATORIES

P. O. Box 279
Casper, Wyoming

RECEIVED

MAR 11 1970

CRUDE OIL ANALYSIS REPORT

COLO. OIL & GAS CONS. COMM.

Company Continental Energy Corporation Date February 22, 1970 Lab. No. 3289-2
Well No. #1 Penrose et al Location NE NW 35-1N-95W
Field Wildcat Formation Wasatch "G"
County Rio Blanco Depth 1824-43
State Colorado Analyzed by Staff

Swabbing Test 2-16-70

GENERAL CHARACTERISTICS

Specific gravity @ 60/60 °F. 0.8180
A.P.I. gravity @ 60 °F. 41.5
Saybolt Universal Viscosity @ 70°F., seconds 44*
Saybolt Universal Viscosity @ 100°F., seconds -
B. s. and water, % by volume 55 (water)
Pour point, °F. 65
Total sulphur, % by weight 0.11

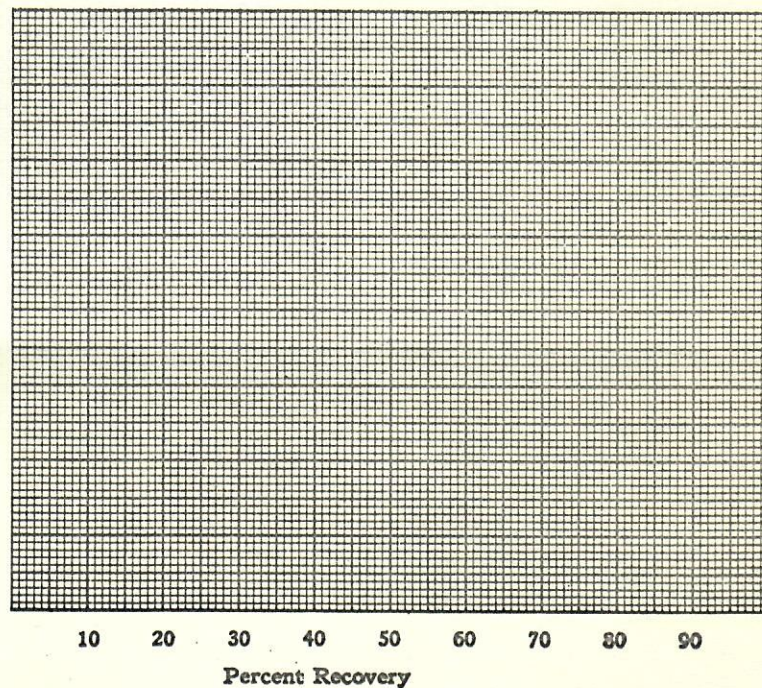
REMARKS: * approximate value--insufficient sample for further tests.

ENGLER DISTILLATION

Recovery, %	Temperature, °F.
IBP	
5	
10	
15	
20	
25	
30	
35	
40	
45	
50	
55	
60	
65	
70	
75	
80	
85	
90	
95	
E.P.	

Recovery, %
Residue, %
Loss, %

DISTILLATION GRAPH



Approximate Recovery

300 EP gasoline, %
392 EP gasoline, %
500 EP distillate, %