ROCK TYPE

- Shale
- Siltstone
- Sandstone
- Limestone
- Interbedded Limestone & Sandstone

ACCESSORIES

- Calcareous
- Chert, light and dark
- No Sample

COUNTY WHITE PINE — STATE NEVADA

OPERATOR: TRUE OIL COMPANY

PROSPECT: Roark Federal — HOLE NO.: #13-11

STATE: Nevada — COUNTY: White Pine

TWP	RGE	LOCATION WITHIN SECTION	TOTAL DEPTH
13N	61E	NW SW 660 FWL 3300 FNL	2404'

STATUS: P&A

SPUD DATE: May 19, 1986

COMPLETION DATE: May 30, 1986

DRILL CONTRACTOR: TRUE OIL COMPANY

DRILLERS BY: Chris Hanley, Marilyn Miller — ACCTTS BY: Same

ELEV 5949: K.B. 5964.0' — D.F. 5963.0' — G.L.

LOGS: DIL 312'-2398' — FDC/CNL 312'-2401'

REMARKS

OILS & GAS DATA (Formation tops picked from E-logs)	DRILLING TIME (5 AVERAGE)	LITHOLOGY	DESCRIPTION
NB # 1A HTC J44, 15' Geolograph Disengaged			NO SAMPLE
Dev 1/4°, 65'			
Dev. 3/4°, 95'			
Dev 3/4°, 125'			LS, AV GRAIN, PR-MOD GRAIN PRC, F 2 DL, REAMING, 4 CUTS, OIL STAIN, FAIR-GOOD FLOW STR, LT BROWN FRS, BRN CAP CRNS, 2 FLOR, NO CUT, NO STR
Dev. 3/4°, 156'			
200			NO SAMPLE
Log time 5 minutes			
Dev. 1/4°, 231'			
NB # 2A Sec 5R4F, 224'			
Dev 1/2°, 251'			
Dev 3/4°, 281'			
300			
10 3/4" Surface Casing			
3 1/2 40.5 J-55 Casing			
NB # 1HTC, J-22, 315' Geolograph Malfunction			
Log time 4 minutes			
Dev 1/2°, 340'			
400 Dev 1/2°, 400'			LS, 1 LT 65-LT BRN SFT, 60%-F 2 DL, 40% CALC, SL ANHY, FLOR, SL STR
Dev 1/2°, 430'			LS, 1-3 LT BR, 80%-F 2 DL, CHRDS FRG, SL LT BRN SFT, 20% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Dev 3/4°, 460'			LS, 1 LT 65-BR, CHRT, 80%-F 2 DL, 20% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Dev 3/4°, 490'			SLTST & LS, 1 LT 65-BR SFT, 60%-F 2 DL, 40% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
500			LS, 1 LT 65-LT BR SFT, 90%-F 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Dev 1°, 520'			LS, 1 LT 65-BR, CHRT, 1 F 2 DL, TR CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Dev 3/4° 550'			LS, 1 LT 65-BR, CHRT, 1 F 2 DL, TR CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Log time 5 min. Drilling break			LS, 1 LT 65-BR, CHRT, 1 F 2 DL, TR CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Dev 1°, 580'			LS, 1 LT 65-BR, CHRT, 1 F 2 DL, TR CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
600			LS, 1 LT 65-BR, CHRT, 1 F 2 DL, TR CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Dev 3/4°, 609'			LS, 1 LT 65-BR, CHRT, 1 F 2 DL, TR CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Dev 1/4°, 637' Drilling break			LS, 1 LT 65-BR, CHRT, 1 F 2 DL, TR CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
700			SLTST & LS, MOD SCR-MOD PRC, F 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Dev 1°, 705'			LS, 1 LT 65-BR SFT, 1 F 2 DL, TR CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Dev 1°, 735'			LS & SS, LT, 1 LT 65-BR SFT, 1 F 2 DL, 5% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Dev 1°, 765'			LS, 1 LT 65-1 LT BRN SFT, 1 F 2 DL, 5% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
800			LS, 1 LT 65-1 LT BRN SFT, 1 F 2 DL, 5% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Dev 1/2°, 825'			LS, 1 LT 65-1 LT BRN SFT, 1 F 2 DL, 5% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Dev 1/2° 885'			LS, 1 LT 65-LT BRN SFT, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
900			LS, 1 LT 65-LT BRN SFT, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Dev 1/4°, 945'			LS, 1 LT 65-LT BRN SFT, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Dev 1°, 985' Geolograph malfunction			LS, 1 LT 65-LT BRN SFT, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
1000 NB # 2 Sec 5R4F, 994' Log time 8min.			LS 1 SS TRTRNS, LT 65 MOD SR-LT MOD PRC, F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
Dev 1/2°, 1075'			LS 1 LT 65-LT BRN SFT, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
1100			LS, 1 LT 65-LT BRN SFT, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
DST #1 (149-180) Dev 1/2°, 1187' Log time 8 min.			LS, 1 LT 65-LT BR SFT, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
1200			LS, 1 LT 65-LT BR SFT, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Drilling break, good show			LS, 1 LT 65-LT BR SFT, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Dev 1°, 1255'			LS, 1 LT 65-LT BR SFT, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Drilling break-very poor show			LS, 1 LT 65-LT BR SFT, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
1300			LS, 1 LT 65-LT BR SFT, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Dev. 1/4°, 1351'			SLTST, DK 65-LT BR, 20% PRC, 10-MOD SR, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
Log time 10 min.			LS, 1 LT 65-LT BR SFT, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
1400			LS, 1 LT 65-LT BR SFT, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Drilling break, weak show			LS, 1 LT 65-LT BR SFT, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Dev. 2 1/2°, 1450'			LS, 1 LT 65-LT BRN PR, 1-2 DL, 20% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
1500			LS, 1 LT 65-LT BRN PR, 1-2 DL, 20% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Dev. 2 3/4°, 1500 Gap in Geolograph footage			LS, 1 SS TR-MOD SR, F-M, 2 DL, TRTRNS, SLTY, 5 PP, 1% CALC, HARD CRT, LT BRN-LT BR, 1 F 2 DL, TR CALC, 5 PP, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT, NO STR
Dev. 3 3/4°, 1540'			LS, 1 MOD-MOD, F 2 DL, 1% CALC, 1 FLOR, 1 CUT, 90% SFT, 10% CALC, SL ANHY, NO STR
Drilling break, no show			LS, 1 LT 65-LT BR, 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
1600			LS, 1 LT 65-LT BR, 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Dev 5°, 1603'			LS, 1 LT 65-LT BR, 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Log time 13 min.			LS, 1 LT 65-LT BR, 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Chainman Shale-1648'			LS, 1 LT 65-LT BR SFT, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, NO CUT, NO STR
Dev 3/4°, 1670' NB # 3 Rest PPG, 1684'			SLTST, 1 LT 65-DK BR, 10% PRC, 10-MOD SR, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
1700			SLTST, 1 LT 65-DK BR, 10% PRC, 10-MOD SR, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
1800			SH, 1 LT 65-DK BR, 10% PLTY-BLKY FRAG, 10% SLTY, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
Dev. 4/4°, 1824'			SH, 1 LT 65-DK BR, 10% PLTY-BLKY FRAG, 10% SLTY, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
1900			SH, 1 LT 65-DK BR, 10% PLTY-BLKY FRAG, 10% SLTY, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
1920-1930 40unit gas kick Dev 5° 1925'			SH, 1 LT 65-DK BR, 10% PLTY-BLKY FRAG, 10% SLTY, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
1950-1970, 28 unit gas kick Dev 5° 1950'			SH, DK 65-BLK, COAL, 1 SLTY, SLST & SH, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, 1% PRC FRAG, FOLIATED, LS, 1 LT 65-BLK, 5-C PRC, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
2000			SH & SLTST, 2 DK-DK BR, CHRT, FIS & PLTY, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
Drilling break, weak show			SH & SLTST, DK 65-LT BR, FIS & PLTY, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
Dev. 5/4°, 2045'			SH & SLTST, DK 65-LT BR, FIS & PLTY, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
Gap in Geolograph footage			SH, DK 65-BLK, 10% PRC, 10-MOD SR, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
2100			SH, DK 65-BLK, 10% PRC, 10-MOD SR, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
Dev. 5/2°, 2106'			SH, DK 65-BLK, 10% PRC, 10-MOD SR, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
2200			SH, DK 65-LT BR, SLTY, PLTY, BRIT, CALC, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
Log time 28min.			SH, DK 65-LT BR, SLTY, PLTY, BRIT, CALC, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
Gap in Geolograph footage			SH, DK 65-BLK, 10% PRC, 10-MOD SR, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
2300 Drilling break, no show			SH, DK 65-BLK, 10% PRC, 10-MOD SR, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
2400			SH, DK 65-BLK, 10% PRC, 10-MOD SR, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR
TD 2404'			SLTST, DK 65-LT BR, 20% PLTY, BRIT, 10-MOD SR, 1 F 2 DL, 10% CALC, SL ANHY, 1 FLOR, SLSH SH FLU, 1 FLOR SP SFT, 1 CUT, 90% SFT BRN, 10% CALC, SL ANHY, NO STR