GEOLOGICAL REPORT

FINAL

MAR 05 2019
GEOLOGICAL SURVEY

Larry A. Nicholson

COMPANY MARECO, Inc.
API # 43-047-54701 Field/Unit Lundgren East
LEASE Lundgren API # 43-047-54701
WELL # 32-28 Well # 32-28
LOCATION 2004' FNL 1603' FEL
SECTION 28 TWP 14S RGE 22W
COUNTY Uintah STATE Utah

SPUD DATE/TIME 01/15/2019 @ 12:00 Hrs
TD/TIME 01/30/2019 @ 08:00 Hrs
CASING 8/5/19 @ 2700.00 Ft
MUD UP TO 2800'
DRILLING CONTRACTOR Ensign #47 Tan Rags

ELEVATIONS
GL 5433'
KB 5461'
DF 5460'
KB - GL 28'

CASING POINTS
Surface: 8 5/8" @ 1500' 20#
Production: 5 1/2" @ 8,510' 20#
Tail: 2 7/8" @ 8,510' 6.5#

COMPANY MAN Jim Rowley
MUD CO. Ken Mecham
DRILLING SUPERVISOR Larry Nicholson
WELLSITE GEOLOGIST LARRY A.NICHOLSON

ELECTRICAL SURVEY Foster Tim Rice Jason Nelson

FORMATION TOPS & STRUCTURAL POSITION

FORMATION	DATE	TIME	DEPTH	SUBSEA	DIP	DIST.
Airport			2325	-2847	-2324	-523
Shallow Uinta			2577	-2099	-2577	-275
Deep Uinta			3437	-2976	-3436	-314
Longwy			3475	-3545	-3449	-3371	-15
Top Green River			3545	-3545	-3545	-3545	0
BGC			3585	-3585	-3585	-3585	0
Parachute			4200	-2969	-4204	-2960	-12
Top Wasatch Lst			4200	-4200	-4204	-4200	-4
Parachute 30			4200	-4200	-4200	-4200	0
Colorado Zone			4616	-4615	-4616	-4615	-15
Mesa			4700	-4699	-4700	-4699	-1
Mesa 10			4800	-4799	-4800	-4799	-1
TD			4900	-3799	-4907		

REFERENCE WELLS: Chief Ortiz, Lundgren #1, NW SW SE, 28 T14S-R22W AB 2512.

LOG TOP PROBABILITIES FOR ROCK TYPES: HIGH (HIGH) MEDIUM (MEDIUM) LOW (LOW)

DRILLER'S TEST SUMMARY

Depth 1500' 0 Units Gas 0 Units Oil 0 Units Water 0 Units Mud Loss 0 Bbls Flow 0 Bbls Pit Gain 0 Bbls Pump Pressure 0 Psi Pump Stroke 0 Spm Mud Wt. 8.4 Lb/Gal Vis 27 Sec/Qt Chlorides 0 Mg/L Ph 0 Pm 0 Pf 0 Mf 0 Ca 0 Hardness 0 Mg/L Sand 0 % Solids 0 % Oil 0 % Water 0 % Temp 0 °F Time 0 Min Depth 2700' 0 Units Gas 0 Units Oil 0 Units Water 0 Units Mud Loss 0 Bbls Flow 0 Bbls Pit Gain 0 Bbls Pump Pressure 0 Psi Pump Stroke 0 Spm Mud Wt. 8.4 Lb/Gal Vis 27 Sec/Qt Chlorides 0 Mg/L Ph 0 Pm 0 Pf 0 Mf 0 Ca 0 Hardness 0 Mg/L Sand 0 % Solids 0 % Oil 0 % Water 0 % Temp 0 °F Time 0 Min

REMARKS & RECOMMENDATIONS

- Based on the results in the DST # 2, 3, 4,
and probable OK & attempt, cap rock run.

- DST and PDS are in same depth.

- Samples in general were fine and shaly.
Low to moderate porosity.

- There was a total of 271.5' of cutters (2' shorts).

LEGEND

Sandstone | Shale | Limestone/Dolomite | Sandstone | Chert | Anhydrite