

HOBBS OCD
JUL 31 2017
RECEIVED

DRILLING PROGNOSIS
GULF EXPLORATION – SALTY DOG # 1-6

C N/2 NE/4 SE/4-SECTION 23-T25N-R23W
2280’FSL & 660’ FEL
LEA COUNTY, NEW MEXICO

GROUND LEVEL: 3,946’

PROPOSED TOTAL DEPTH: 11,800’

ESTIMATED FORMATION TOPS

• SANTA ROSA	1,200’	• CLEARFORK	6,900’
• RUSTLER	1,850’	• TUBB	7,500’
• SALADO	2,100’	• ABO	8,300’
• TANSIL	2,900’	• WOLFCAMP LIME	9,700’
• YATES	3,215’	• WOLFCAMP SHALE	10,125’
• QUEEN	4,050’	• STRAWN	11,450’
• GRAYBURG	4,300’	• ATOKA	11,600’
• GLORIETA	6,300’	• TD	11,800’

CASING PROGRAM

HOLE INTERVAL	HOLE SIZE	CASING SIZE	CASING SPEC’S
0’ - ± 2000’	17.50”	13.375”	48# H40 STC
± 2000’ - 4750’	11.0”	8.625”	32# J55 LTC
4750’ – 11,800’	7.875”	5.50”	17# & 20# N80-LTC

CEMENTING PROGRAM

CASING SETTING DEPTH	HOLE SIZE	CASING SIZE	STAGE 1 CEMENT	STAGE 2 CEMENT
± 2000’ (Minimum 25’ into Rustler Interval)	17.5”	13.375”	±1150 SKS C-Lite & 3 % Salt & .5% SMS & 1/4Lb./Sk Cello- flake Weight: 12.4 PPG Yield: 2.05 CuFt/Sk	±310 SKS Class C Containing 2 % CACL 1/4Lb./Sk. Celloflake Weight: 14.8 PPG Yield: 1.36 CuFt/Sk
4750’	11.00”	8.625”	±750 SKS 50/50/10 Poz/C/Gel & 3 % Salt & .& 1/4Lb./Sk Celloflake Weight: 11.8 PPG Yield: 2.42 CuFt/Sk	±750 SKS 50/50 Poz/C & 3 % Salt & .5% C-17 & .5% C- 37 .& 1/4Lb./Sk Celloflake Weight: 14.5 PPG Yield: 1.22 CuFt
11,800’	7.875”	5.50”	± 1240 SKS 50/50/2 Poz/H/Gel & 3% Salt & .2% C-37 & .2% C-20 (7800’ Height of Fill)	

MUD PROGRAM

INTERVAL	HOLE SIZE	MUD TYPE	WEIGH T (P.P.G.)	VIS (SEC./Q T	FIL (C.C.)	PH	CL PPM	SOL %
50’ TO ±1600’	17 1/2”	NATIVE	8.8 - 9.6	32 T0 34	N/C	10.0	1-6K	3-8
±1600’ – ±2000’	17 1/2”	NATIVE/ BRINE	9.6 - 10.5	32 TO 34	N/C	10.0	2-6K	3-8
±2000’ - 4,750’	11.0”	NATIVE/BRINE	9.6 - 10.5	32-34	N/C-50CC	10.0	6-150K	3-8
±4,750’ - 7,000’	7 7/8”	NATIVE/FRESH	8.3 - 8.5	28-30	N/C	10.0	3-6K	.5-.75
7,000 - 10,000’		NATIVE/BRINE	8.5 - 9.0	28-30	N/C	10.0	6-90K	.75-1
10,000’– 11,800’		CB/POLY	9.0-9.4	36-38	10CC	10.0	90-120K	2-4

- INCREASE VISCOSITY AS NECESSARY AT TD FOR LOGGING AND CASING OPERATIONS

MUD CLEANING EQUIPMENT

CONVENTIONAL SHAKER, DESANDER, AND DESILTER (AS RECOMMENDED BY MUD CO.)

B.O.P EQUIPMENT REQUIRED

INTERVAL

±2000' TO 11,800' ANNULAR: 13 5/8" X 3M
 DOUBLE RAM 13 5/8" X 3M
 CHOKE MANIFOLD: 4" X 3" X 3M W/ 2 ADJ CHOKES

POTENTIAL DRILLING HAZARDS

50' TO ±2000' POSSIBLE SWELLING, SLOUGHING CLAY, EXCESSIVE SOLIDS, MUD RINGS,
 AND SWELLING SANDS. POSSIBLE WIPER TRIPS PRIOR TO RUNNING CASING.
±2,000' TO 4,750' POSSIBLE SWELLING, SLOUGHING CLAY, EXCESSIVE SOLIDS, MUD RINGS,
 AND SWELLING SANDS. POSSIBLE WIPER TRIPS PRIOR TO RUNNING CASING
4,750' TO 11,800' USE FRESH GEL PILLS CONTAINING 6-20 PPB OF LCM MATERIAL FOR HOLE
 CLEANING AND TO SEAL ANY LOSSES.

SURVEYS

HOLE INTERVAL

50' TO ±2000' RUN INCLINATION SURVEYS EVERY 500' FROM SURFACE TO SURFACE
 HOLE T.D.
±2000' TO 11,800' RUN INCLINATION SURVEYS EVERY 500' HOLE OR BEFORE EACH BIT TRIP
 WHICH EVER COMES FIRST.

LOG EVALUATIONS

INTERVAL

±4750' TO T.D. HIGH RESOLUTION INDUCTION - SP, COMPENSATED NEUTRON -
 FORMATION DENSITY - GR - CALIPER

MUD LOGGING

- Begin 1 man logging service at 1,000'. Commence catching samples per instructions at 10,000'.

DRILL STEM TESTS

- NONE SCHEDULED

CORES

- NONE SCHEDULED

WELL EQUIPMENT/TUBULARS

CASING: ±2000' - 13 3/8" 48# J55 STC
 4,750' - 8.5/8" 32# J55 LTC
 11,800' - 5 1/2" 17.0# HCP110-BTC

TUBING: 11,800' - 2 7/8" 6.5# N80 EUE

WELL HEAD: "A" SECTION - 13 5/8" X 13 3/8" 3M CASING HEAD
 "B" SECTION - 13 5/8" X 11" 5M CASING SPOOL
 "C" SECTION - 11" X 7 1/16" 5M TUBING HEAD

GULF EXPLORATION, L.L.C.

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Consultant

DIRECTIONS: From Intersection of US Highway 82 & 32nd Street in Lovington, NM, Proceed North on 32nd Street approximately 0.42 Miles, Turn Left (West) and proceed 482' To the Southeast Corner of Location.