

30-015-39407

Operator Name/Number: Occidental Permian Limited Partnership 157984
 Lease Name/Number: Devón 8 Fee #1H
 Pool Name/Number: Undesignated Hay Hollow Bone Spring, North 30216
 Surface Location: 990 FNL 330 FEL NENE(A) Sec 8 T25S R28E
 Bottom Hole Location: 750 FNL 350 FWL NWNW(D) Sec 8 T25S R28E

C-102 Plats: 9/8/11 9/13/11 Elevation: 3009 3' GL

Proposed TD. Pilot Hole 9235' TVD Horizontal Lateral 6421' TVD 10897' TMD
 SL - Lat: 32.1490544 Long: 104.1016567 X= 571702.2 Y= 418024.6 NAD - 1927
 BH - Lat: 32.1496478 Long: 104.1167685 X= 567024.7 Y= 418230.8 NAD - 1927

Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>OD Csg</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>	<u>Condition</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
17-1/2"	435'	13-3/8"	48	ST&C	H-40	New	2.69	2.33	2.16
				Hole filled with 8 6# Mud			770#	1730#	
12-1/4"	2500'	9-5/8"	40	LT&C	J-55	New	3.14	1.26	1.81
				Hole filled with 10 2# Mud			2570#	3950#	
8-1/2"	10856'	5-1/2"	17	BT&C	L-80	New	1.65	1.29	1.7
DVT @ 6000' - ECP @ 6050'				Hole filled with 9 4# Mud			6280#	7740#	
12 OH Isolation Packers w/ frac/sleeving sleeves from below ECP to TD @ 10856'									

Collapse and burst loads calculated using Stress Check with anticipated loads

Cement Program:

- a. 13-3/8" Surface Circulate cement to surface w/ 435sx PP cmt w/ 2% CaCl₂, 14.8ppg 1.35 yield 1708# 24hr CS 150% Excess
- b. 9-5/8" Intermediate Circulate cement to surface w/ 850sx HES light PP cmt w/ 5% Salt + .125#/sx Poly-E-Flake + 5#/sx Gilsonite, 12.4ppg 2 10 yield 530# 24hr CS 105% Excess followed by 200sx PP cmt w/ 1% CaCl₂, 14.8ppg 1.34 yield 2125# 24hr CS 105% Excess
- c. 5-1/2" Production Circulate Cement w/ 1090sx HES Light PP cmt w/ 3#/sx Salt + 3#/sx Gilsonite + .125#/sx cellophane, 12.4ppg 2.09 yield 540# 24hr CS 35% Excess followed by 200sx PP cmt, 14.8ppg 1.33 yield 2025# 24hr CS 35% Excess.
- d. Pilot Hole Plug Cement w/ 220sx CL H 50/50 Poz cmt w/ .5% CFR-3, 14.4ppg 1.25 yield 1960# 24hr CS 35% excess from 9205' to +/- 8705' followed by 260sx CL H 50/50 Poz cmt w/ 5% CFR-3, 14.4ppg 1.25 yield 1960# 24hr CS 35% Excess from 6600' to +/- 6000' followed by 280sx PP cmt w/ 3% KCl w/ .75% CFR-3 + .2% HR-601, 17.5ppg .97 yield 4594# 24hr CS 35% excess from 6000' to +/- 5500' 9.4# mud between plugs.

Proposed Mud Circulation System.

Depth	Mud Wt. ppq	Visc sec	Fluid Loss	Type System
0 - 435'	8.4-9.2	38-42	NC	Fresh Water/Spud Mud
435 - 2500'	9.8-10.2	--	NC	Brine Water
2500 - 5900'	8.8-9.0	--	NC	Cut Brine
5900 - 9235' (Pilot)	9.0-9.4	34-36	8-10	Cut Brine Gel/LSND
5900 - 10897' (Curve/Lateral)	9.0-9.4	34-36	8-10	Cut Brine Gel/LSND

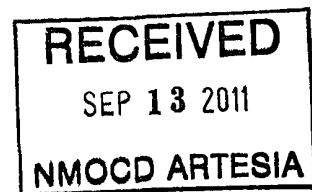
Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times.

BOP Program (1):

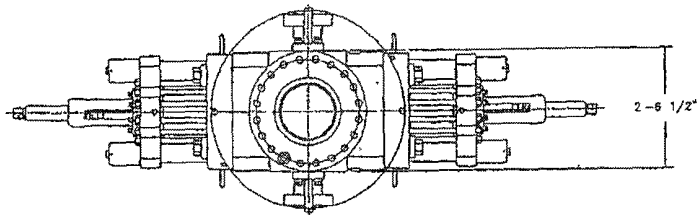
Surface None
 Production 13-5/8" 10M two ram stack w/ 5M annular preventer, 10M Choke Manifold

Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:

Geological Marker	Depth
a. Rustler Anhydrite	414'
b. Bottom Salt	2434'
c. Delaware	2484'
d. Bell Canyon	2534'
e. Cherry Canyon	3324'
f. Brushy Canyon	4529'
g. Bone Spring	6124'
h. 1st Bone Spring	6424'
i. Wolfcamp	9235'







SHAFFER BOLTED-COVER SPHERICAL
ANNULAR PREVENTER, (API 16A
MONOGRAMMED, 13 5/8"-10M
WP), 10M BOTTOM FLANGE x 5M
STUDDED TOP (WEIGHT = 14,300
LBS WITH SHAFFER API 16A HOT
OIL RESISTANT ACRYLONITRILE
ELEMENT)

CAMERON UM DOUBLE
RAM-TYPE PREVENTER (API 16A
MONOGRAMMED, 13 5/8"-10M
WP), WITH 5" CAMERON PIPE
RAMS (CAMRAM FRONT PACKERS
& TOP SEALS) IN TOP CAVITY
AND CAMERON DS SHEARING
BLIND RAMS IN BOTTOM CAVITY.
BOTTOM FLANGE x STUDDED
TOP (WEIGHT = 21,100 LBS.
WITH RAMS)

13 5/8"-10M WP
CAMERON DRILLING SPOOL
(API 16A MONOGRAMMED),
STUDDED TOP x FLANGED BOTTOM
WITH 4 1/16"-10M WP FLANGED OUTLETS
(WEIGHT APPROXIMATELY 8,000 LBS)

CAMERON UM SINGLE RAM-TYPE
PREVENTER (API 16A
MONOGRAMMED, 13 5/8"-10M WP),
WITH 5" CAMERON PIPE RAMS
(CAMRAM FRONT PACKERS & TOP
SEALS) BOTTOM FLANGE x
STUDDED TOP
WEIGHT = 10,800 LBS

H&P FURNISHED
13 5/8"-10M x 11"-5M
ADAPTER SPOOL 2'-0" LONG,
WITH SS RING GROOVES
(MARATHON RIGS 256, 256,
257, 258 & 258 ONLY)

13 5/8-10M STACK

PROPRIETARY

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3'-11 7/8"

4'-3 7/8"

14'-7 1/2"

1'-8 7/8"

2'-6 7/8"

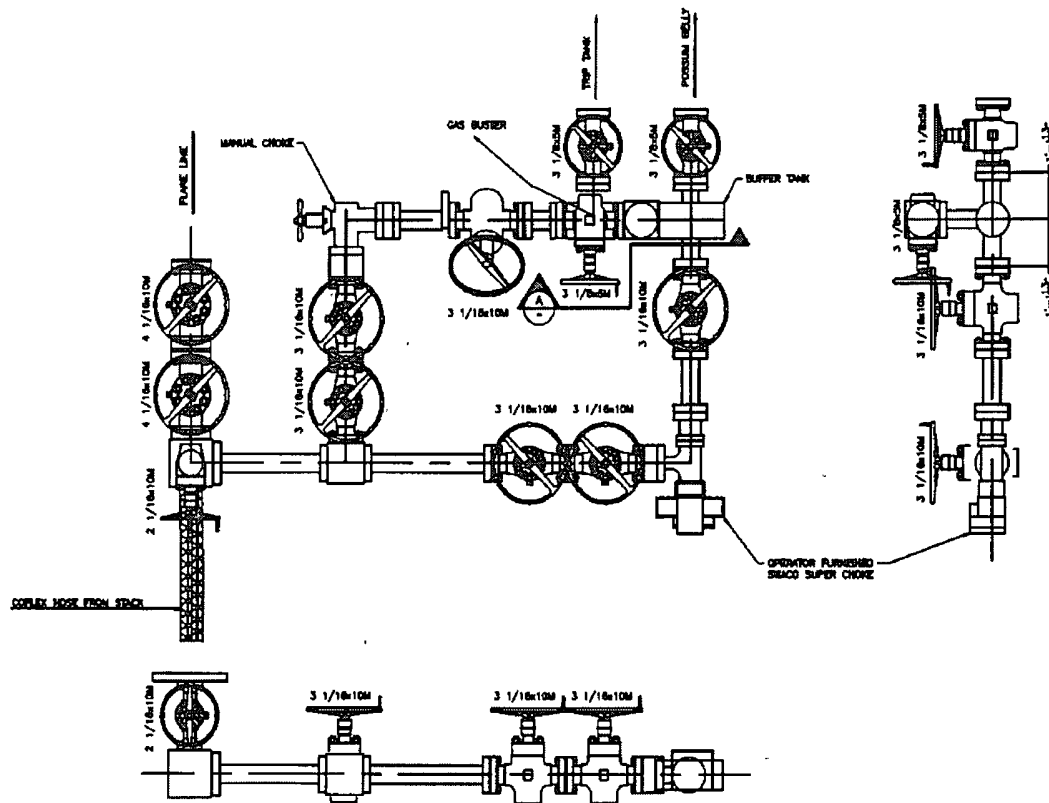
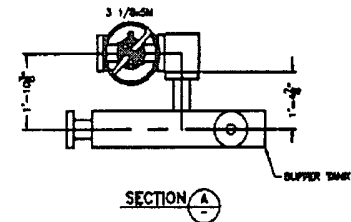
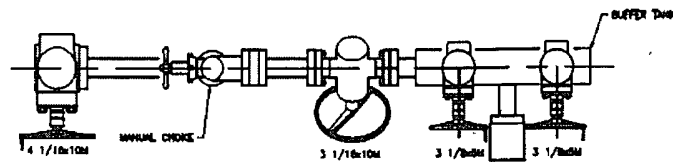
2'-0"

11'-1 5/8" CLOSED

12'-5 3/8" OPERATING

16'-5" OPENED

SEE LIFT LUG DETAIL



ISSUED FOR FABRICATION
 MARCH 8, 1983
 CHAPMAN
 ENGINEER

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DESIGNED BY		DATE		TITLE	
CHECKED BY		DATE		CHOKES MANIFOLD	
PROJECT		FIELD NO.		CUSTOMER NAME	
DATE		DESCRIPTION		BY	
10/18/82	ADJUST DIM TO FIELD CONFIRMED DIM	REV	DATE	DESCRIPTION	BY
SHEET		MTS		DATE 2-28-02	
SCALE 3/4"=1'		SHEET 1 OF 1		216-P1-05 A	

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