

Permit Information:

HOBBS OCD

Well Name: Mars 10 State No. 502H

AUG 12 2014

Location:

SHL: 325' FNL & 1330' FEL, Section 10, T-24-S, R-33-E, Lea Co., N.M.

RECEIVED

BHL: 230' FNL & 1100' FEL, Section 3, T-24-S, R-33-E, Lea Co., N.M.

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
17.5"	0 - 1,310'	13.375"	54.5#	J55	STC	1.125	1.25	1.60
12.25"	0-4,000'	9.625"	40#	J55	LTC	1.125	1.25	1.60
12.25"	4,000' - 5,150'	9.625"	40#	HCK-55	LTC	1.125	1.25	1.60
8.75"	0'-16,355'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60

Cement Program:

Depth	No. Sacks	Wt. ppg	Yld Ft ³ /ft	Slurry Description
1,310'	550	13.5	1.73	Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% CaCl ₂ + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	250	14.8	1.34	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
5,150'	800	12.7	2.22	Class 'C' + 1.50% R-3 + 0.25 lb/sk Cello-Flake + 2.0% Sodium Metasilicate + 10% Salt + 0.005 lb/sk Static Free (TOC @ Surface)
	225	14.8	1.32	Tail: Class 'C' + 0.25 lb/sk Cello Flake + 0.005 lb/sk Static Free
16,355'	350	10.8	3.67	60:40:0 Class C + 15.0 pps BA-90 + 4% MPA-5 + 3.0% SMS + 5.0% A-10 + 1.0% BA-10A + 0.80% ASA-301 + 2.55% R-21 + 8.0 pps LCM-1 (TOC @ 4,650')
	400	11.9	2.38	50:50:10 Class H + 0.80% FL-52 + 0.30% ASA-301 + 0.40% SMS + 2.0% Salt + 0.30% R-21 + 3.0 pps LCM-1 + 0.25 pps Celloflake
	1700	14.2	1.28	50:50:2 Class H + 0.65% FL-52 + 0.45% CD-32 + 0.10% SMS + 2.0% Salt

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 1,310'	Fresh - Gel	8.6-8.8	28-34	N/c
1,310' - 5,150'	Brine	10.0-10.2	28-34	N/c
5,150' - 10,672'	Cut Brine	8.4-9.0	28-34	N/c
10,672' - 16,355' Lateral	Cut Brine	9.0-9.5	40-42	8-10

AUG 12 2014

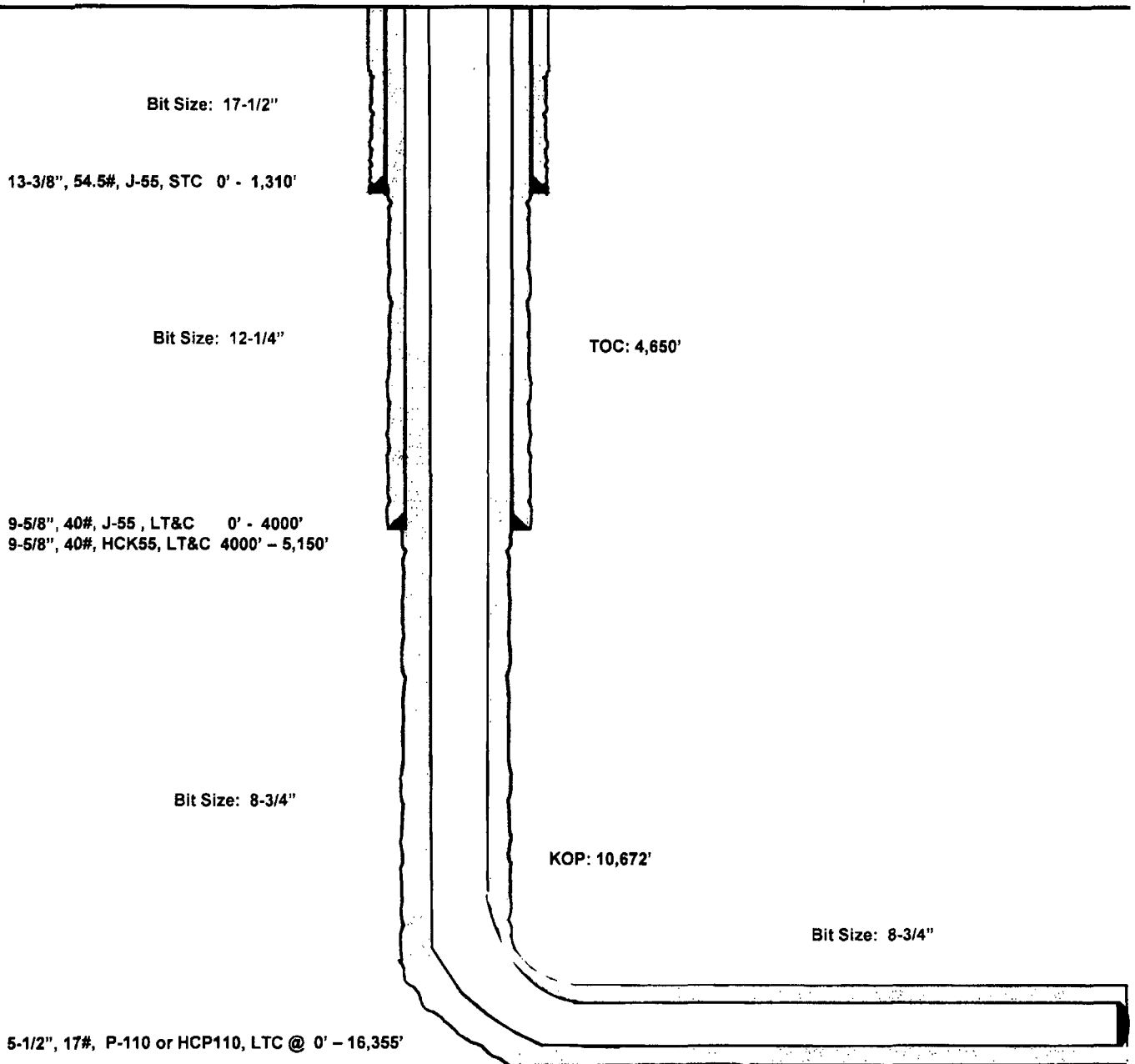
Mars 10 State #502H
Lea County, New Mexico

325' FNL
1330' FEL
Section 10
T-24-S, R-33-E

Proposed Wellbore

API: 30-025-

KB: 3,623'
GL: 3,593'



Lateral: 16,355' MD, 11,171' TVD

BH Location: 230' FNL & 1100' FEL
Section 3
T-24-S, R-33-E



Lea County, NM (NAD 27 NME)

Mars 10 State #502H

Cactus 123

Plan #1

PROJECT DETAILS: Lea County, NM (NAD 27 NME)

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level



Azimuths to Grid North
True North: -0.41°
Magnetic North: 8.79°
Magnetic Field
Strength: 48324.6 nT
Dip Angle: 68.13°
Date: 6/17/2014
Model: IGRF201014

To convert a Magnetic Direction to a Grid Direction, Add 0.79°
To convert a Magnetic Direction to a True Direction, Add 7.21° East
To convert a True Direction to a Grid Direction, Subtract 0.41°

WELL DETAILS Mars 10 State #502H

-N+S	-E+W	Northing	Ground Level	3593.0	Easting	Latitude	Longitude	Spot
0.0	0.0	451293.00	740512.0032° 14'	17.878 N	103° 33' 19.879 W			

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Deg	TFace	VSect	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	10872.6	0.00	0.00	10872.6	0.0	0.0	0.00	0.00	0.0		
3	11420.4	89.76	14.88	11150.0	489.2	123.3	12.00	14.99	438.7		
4	12184.2	89.76	359.81	11163.4	1234.5	220.3	2.00	-80.03	1188.2		
6	18356.9	89.76	359.81	11171.9	6386.0	188.6	0.00	0.00	6218.0	PSHL(Mars 10 State #2H)	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting	Shape
PSHL(Mars 10 State #2H)	11171.9	6386.0	188.6	456878.06	740687.00	Point

