Form 3160-5
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD HOBBS OCD

FEB 19 2014

RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2014

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

***SUBMIT IN TRIPLICATE** – Other instructions on page 2.*

1. Type of Well ☑ Oil Well ☐ Gas Well ☐ Other	5. Lease Serial No. NMNM112940
	6. If Indian, Allottee or Tribe Name
	7. If Unit of CA/Agreement, Name and/or No.
	8. Well Name and No. BRININSTOOL 25 23 33 USA #2H
2. Name of Operator CHEVRON U.S.A. INC.	9. API Well No. 30-025-41627
3a. Address 15 SMITH ROAD MIDLAND, TEXAS 79705 3b. Phone No. *(include area code)* 432-687-7375	10. Field and Pool or Exploratory Area PRONGHORN; BONE SPRING
4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)* SEC 25, T-23S, R-33E, MER NMP, NENW, 55 FNL & 1980 FWL	11. County or Parish, State LEA COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☑ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

PLEASE FIND ATTACHED, A REVISED 9 PT PLAN WITH CHANGES HIGHLIGHTED IN YELLOW.
CHEVRON PLANS TO ADD A PILOT HOLE TO THIS WELL. THE PLAN INCLUDES PLUGGING PROGRAM, AND REVISED LOGGING PROGRAM.

HOBBS OCD

FEB 19 2014

RECEIVED

SEE ATTACHED FOR CONDITIONS OF APPROVAL

APPROVED
FEB 10 2014
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)* DENISE PINKERTON	Title REGULATORY SPECIALIST
Signature Denise Pinkerton	Date 01/13/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title Petroleum Engineer	Date FEB 20 2014
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office KZ	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

3

FEB 20 2014

OHSORE OIL & GAS ODER NO. 1
Approval of Operations on Onshore
Federal and Indian Oil and Gas Leases

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (CFR 43, Part 3160) and the approved Application for Permit to Drill. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling and completion operations.

Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease, which would entitle the applicant to conduct operations thereon.

1. **FORMATION TOPS**

The estimated tops of important geologic markers are as follows:

FORMATION	SUB-SEA	KBTVD	MD
Rustler	2400	1259	
Top of Salt	1940	1719	
Base of Salt	-1375	5034	
Lamar	-1515	5174	
Bell Canyon	-1565	5224	
Cherry Canyon	-2385	6044	
Brushy Canyon	-4085	7744	
Bone Spring	-5125	8784	
Pilot TD	-7441	11100	11,100
Lateral TD	-7221	10880	~~15578~~ 15431

2. **ESTIMATED DEPTH OF WATER, OIL, GAS & OTHER MINERAL BEARING FORMATIONS**

The estimated depths at which the top and bottom of the anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered are as follows:

Substance	Formation	Depth
Water	Rustler	1259
Oil/Gas	Brushy Canyon	7744
Oil/Gas	Bone Spring	8784

All shows of fresh water and minerals will be reported and protected.

3. **BOP EQUIPMENT**

Will have a minimum of a 3000 psi rig stack (see proposed schematic) for drill out below surface casing. Stack will be tested as specified in the attached testing requirements.

See COA

4. **CASING PROGRAM**

a. The proposed casing program will be as follows:

Purpose	From	To	Hole Size	Csg Size	Weight	Grade	Thread	Condition
Surface	0'	1,400'	17-1/2"	13-3/8"	48 #	H-40	STC	New
Shallow Intermediate	0'	5,180'	12-1/4"	9-5/8"	40 #	J-55	LTC	New
Production	0'	15,578'	8-3/4"	5-1/2"	17.0 #	P-110	LTC	New

b. Casing design subject to revision based on geologic conditions encountered.

c. ***A "Worst Case" casing design for wells in a particular area is used below to calculate the Casing Safety Factors. If for any reason the casing design for a particular well requires setting casing deeper than the following "worst case" design, then the Casing Safety Factors will be recalcuated & sent to the BLM prior to drilling.

see COA

SF Calculations based on the following "Worst Case" casing design.

Surface Casing: 1500'
Intermediate Casging: 5200'
Production Casing: 16,250' MD/11,500' TVD (5000' VS @ 90 deg inc)

Casing String	Min SF Burst	Min SF Collapse	Min SF Tension
Surface	1.29	1.14	1.99
Shallow Intermediate	1.12	1.14	1.89
Production	1.31	1.50	1.66

Min SF is the smallest of a group of safety factors that include the following considerations:
Verified SF for intermediate is 1.141 which is greater than 1.125

	Surf	Int	Prod
Burst Design			
Pressure Test- Surface, Int, Prod Csg P external: Water P internal: Test psi + next section heaviest mud in csg	X	X	X
Displace to Gas- Surf Csg P external: Water P internal: Dry Gas from Next Csg Point	X		
Frac at Shoe, Gas to Surf- Int Csg P external: Water P internal: Dry Gas, 15 ppg Frac Gradient		X	
Stimulation (Frac) Pressures- Prod Csg P external: Water P internal: Max inj pressure w/ heaviest injected fluid			X
Tubing leak- Prod Csg (packer at KOP) P external: Water P internal: Leak just below surf, 8.7 ppg packer fluid			X
Collapse Design			
Full Evacuation P external: Water gradient in cement, mud above TOC P internal: none	X	X	X
Cementing- Surf, Int, Prod Csg P external: Wet cement P internal: water	X	X	X
Tension Design			
100k lb overpull	X	X	X

5. CEMENTING PROGRAM

Slurry	Type	Top	Bottom	Weight	Yield	%Excess	Sacks
Surface				(ppg)	(sx/cu ft)	Open Hole	
Lead	C + 4% Gel	0'	1,300'	13.7	1.65	250	1813
Tail	Class C	1,300'	1,400'	14.8	1.33	250	213
	***Note -- the 100' fill of Tail cement shown above is assuming 250% excess over 17-1/2" gauge hole. If a 17-1/2" gauge hole was used for volume calculations, the 213 sacks of Tail cement would result in 350' of fill.						
Intermediate							
Lead	TXI + 5% Salt	0'	4,680'	12	1.99	250	2072
Tail	50C/50Poz +5% Salt	4,680'	5,180'	14.2	1.37	250	414
Production							
Lead	35/65Poz H +8% Gel	4,680'	10,402'	12.4	2.19	75	1114
Tail	50/50Poz H +2% Gel	10,402'	11,152'	14.5	1.28	75	264

1. Final cement volumes will be determined by caliper.
2. Surface casing shall have at least one centralizer installed on each of the bottom three joints starting with the shoe joint.
3. Open hole packers and production casing will be left uncemented from TD of 15,578' to End of Curve of 11,152', and the rest of the production casing will be cemented using a Stage Tool from 11,152' to 4,680'.

4. Production casing will have one centralizer on every other joint from Stage Tool to KOP (horizontal type) and from KOP to intermediate casing (bowspring type).

Pilot Hole Plugging Plan:

Note: - The 8-3/4" Pilot Hole will TD within the Bone Spring formation at +/- 11,100' (exact depth of Pilot Hole TD will depend on geologic tops encountered while drlg)
An open hole cemented whipstock will be utilized with 2-7/8" tail pipe. The tail 2-7/8" tail pipe will be cemented in place from the Pilot hole TD of 11,100' MD/TVD to the whipstock/KOP at 10402' MD/TVD. (KOP is currently planned at 10402' but is subject to change after evaluating Pilot Hole logs).

Slurry	Type	Top	Bottom	Weight	Yield	%Excess	Sacks
				(ppg)	(sx/cu ft)	Open Hole	
Plug Cement	Class H	10,402'	11,100'	17.2	0.97	35	406

6. MUD PROGRAM

From	To	Type	Weight	F. Vis	Filtrate
0'	1,400'	Spud Mud	8.4 - 8.7	32 - 34	NC - NC
1,400'	5,180'	Brine	9.5 - 10.1	28 - 29	NC - NC
5,180'	11,100'	FW/Cut Brine	8.3 - 9.5	28 - 29	NC - NC
10,402'	11,152'	Cut Brine	8.3 - 9.5	32 - 36	15 - 25
11,152'	15,578'	FW/Cut Brine	8.3 - 9.5	28 - 29	NC - NC

A closed system will by utilized consisting of above ground steel tanks. All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited in an approved sanitary landfill. Sanitary wastes will be contained in a chemical porta-toilet and then hauled to an approved sanitary landfill.

All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation Division rules and regulations.

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

Visual mud monitoring equipment shall be in place to detect volume changes indicating loss or gain of circulating fluid volume. When abnormal pressures are anticipated -- a pit volume totalizer (PVT), stroke counter, and flow sensor will be used to detect volume changes indicating loss or gain of circulating fluid volume.

A weighting agent and lost circulating material (LCM) will be onsite to mitigate pressure or lost circulation as hole conditions dictate.

7. TESTING, LOGGING, AND CORING

The anticipated type and amount of testing, logging, and coring are as follows:

a. Drill stem tests are not planned.
b. The logging program will be as follows:

TYPE	Logs	Interval	Timing	Vendor
OH	Quad Combo	Pilot TD to Surface	After TD of Pilot	TBD
Mudlogs	2 man mudlog	Int Csg to TD	Drillout of Int Csg	TBD
OH	Checkshot Survey	Pilot TD to Surface	After TD of Pilot	TBD
LWD	MWD Gamma	Curve and Lateral	While Drilling	Phoenix

c. Core samples are not planned.
d. A Directional Survey will be run.

8. ABNORMAL PRESSURES AND HYDROGEN SULFIDE

a. No abnormal pressures or temperatures are expected. Estimated BHP is: 4809 psi
b. Hydrogen sulfide gas is not anticipated.

HOBBS OCD

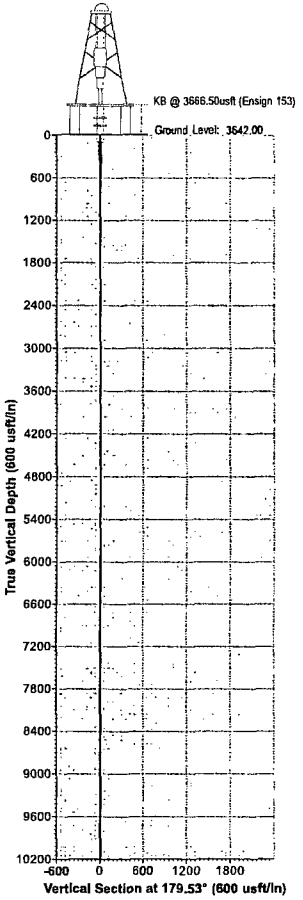
FEB 19 2014

RECEIVED

Project: Lea County NM (NAD27 NME)
Site: Brininstool 25-23-33 USA
Well: #2H
Wellbore: WB1/Job #1410164
Design: Plan #1 01-23-14
Rig: Ensign 153

Azimuths to Grid North
True North: -0.43°
Magnetic North: 6.82°

Magnetic Field
Strength: 48393.5snT
Dip Angle: 60.18°
Date: 01/23/2014
Model: IGRF2010_14



WELL DETAILS

Ground Level: 3642.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	467370.00	748971.00	32° 16' 56.44870 N	103° 31' 39.79327 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	10355.42	0.00	0.00	10355.42	0.00	0.00	0.00	0.00	0.00		KOP, 12°/100' Build
3	11109.58	90.50	179.53	10832.86	-481.62	3.91	12.00	179.53	481.63		LP, Hold 90.5° Inc, 179.53° Azm
4	15431.27	90.50	179.53	10795.15	-4803.00	39.00	0.00	0.00	4803.16	PBHL-Brininstool 25-23-33 #2H	TD at 15431.27

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL-Brininstool 25-23-33 #2H - plan hits target center	10795.15	-4803.00	39.00	462567.00	749010.00	32° 16' 8.91858 N	103° 31' 39.75909 W	Rectangle (Sides: L20.00 W100.00)

Map System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone Name: New Mexico East 3001

Local Origin: Well #2H, Grid North

Latitude: 32° 16' 56.44870 N
Longitude: 103° 31' 39.79327 W

Grid East: 748971.00
Grid North: 467370.00
Scale Factor: 1.000

Geomagnetic Model: IGRF2010_14
Sample Date: 23-Jan-14
Magnetic Declination: 7.25°
Dip Angle from Horizontal: 60.18°
Magnetic Field Strength: 48393

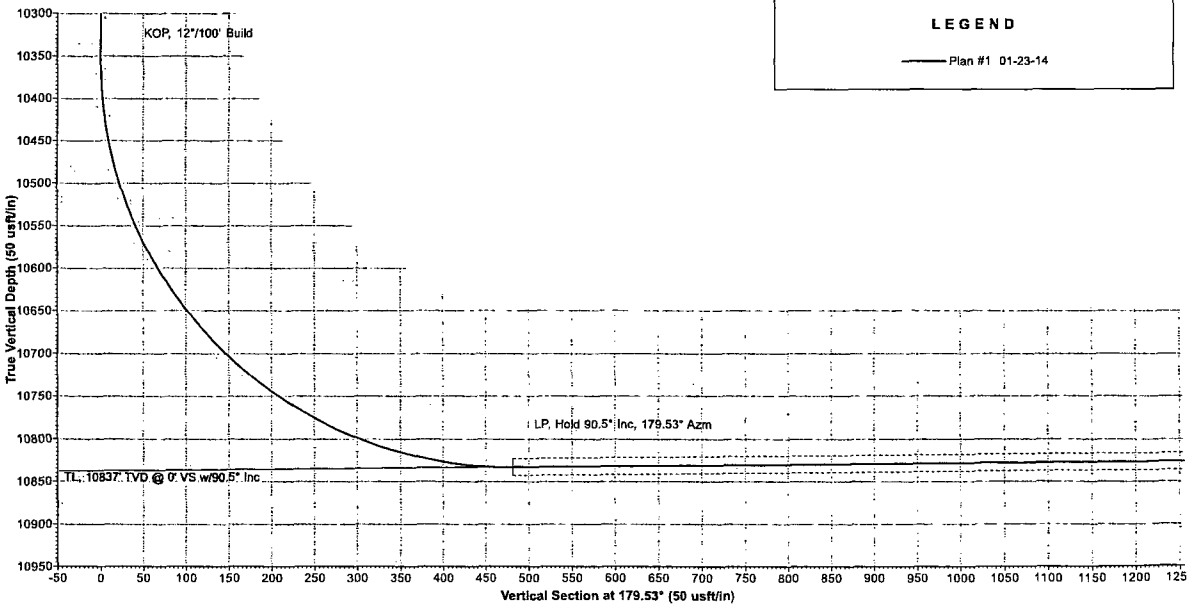
To convert a Magnetic Direction to a Grid Direction, Add 6.82°
To convert a Magnetic Direction to a True Direction, Add 7.25° East
To convert a True Direction to a Grid Direction, Subtract 0.43°

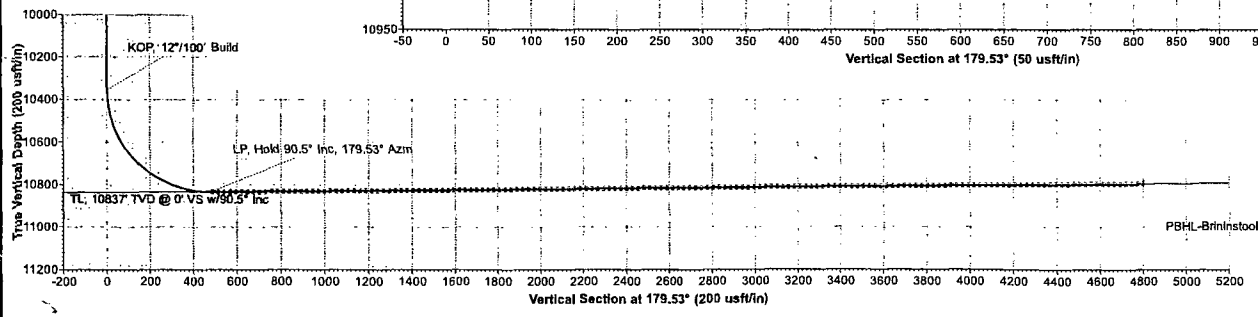
FORMATION TOP DETAILS

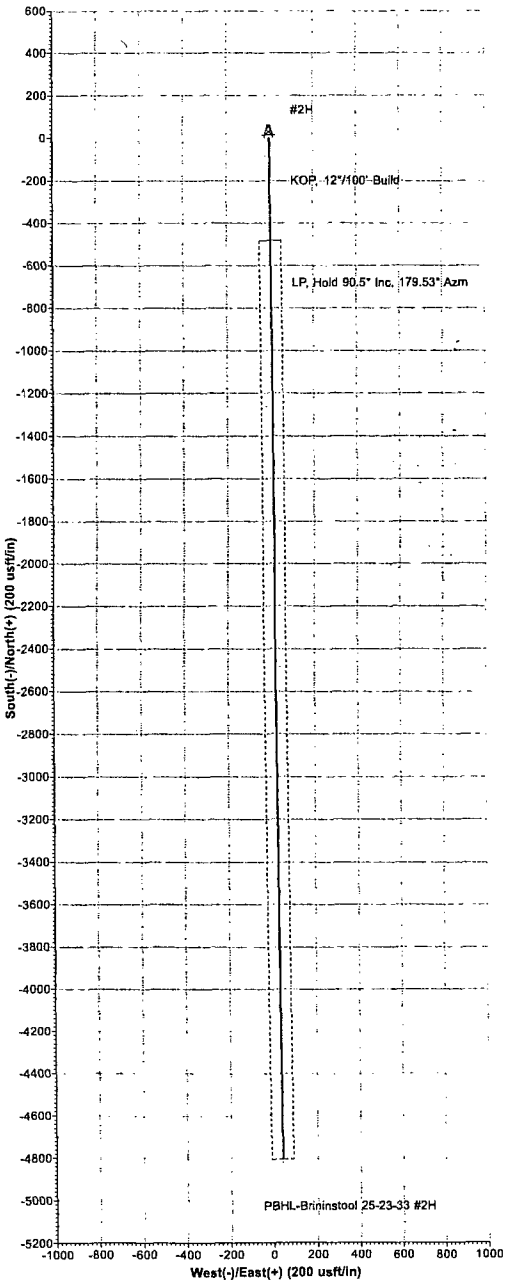
TVDPath	MDPath	Formation	DipAngle	DipDir
10832.67	11101.61	TL, 10837' TVD @ 0' VS w/90.5° Inc	-0.50	179.53

LEGEND

Plan #1 01-23-14







Created By: Julio Piña Date: 15:20, January 23 2014

Chevron

Lea County NM (NAD27 NME)
Brininstool 25-23-33 USA
#2H

WB1/Job #1410164

Plan: Plan #1 01-23-14

Standard Planning Report

23 January, 2014

Phoenix Technology Services

Planning Report

Database:	GCR DB	**Local Co-ordinate Reference:**	Well #2H
Company:	Chevron	**TVD Reference:**	KB @ 3666.50usft (Ensign 153)
Project:	Lea County NM (NAD27 NME)	**MD Reference:**	KB @ 3666.50usft (Ensign 153)
Site:	Brininstool 25-23-33 USA	**North Reference:**	Grid
Well:	#2H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	WB1/Job #1410164		
Design:	Plan #1 01-23-14		

Project	Lea County NM (NAD27 NME)		
Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Brininstool 25-23-33 USA				
Site Position:		**Northing:**	467,370.00 usft	**Latitude:**	32° 16' 56.44870 N
From:	Map	**Easting:**	748,971.00 usft	**Longitude:**	103° 31' 39.79328 W
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.43 °

Well	#2H					
Well Position	**+N/-S**	0.00 usft	**Northing:**	467,370.00 usft	**Latitude:**	32° 16' 56.44870 N
	+E/-W	0.00 usft	**Easting:**	748,971.00 usft	**Longitude:**	103° 31' 39.79328 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	3,642.00 usft

Wellbore	WB1/Job #1410164			
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010_14	01/23/14	7.25	60.18	48,393

Design	Plan #1 01-23-14			
Audit Notes:				
Version:	**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**
	0.00	0.00	0.00	179.53

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10,355.42	0.00	0.00	10,355.42	0.00	0.00	0.00	0.00	0.00	0.00	
11,109.58	90.50	179.53	10,832.86	-481.62	3.91	12.00	12.00	0.00	179.53	
15,431.28	90.50	179.53	10,795.15	-4,803.00	39.00	0.00	0.00	0.00	0.00	PBHL-Brininstool 25-2

Phoenix Technology Services

Planning Report

Database:	GCR DB	**Local Co-ordinate Reference:**	Well #2H
Company:	Chevron	**TVD Reference:**	KB @ 3666.50usft (Ensign 153)
Project:	Lea County NM (NAD27 NME)	**MD Reference:**	KB @ 3666.50usft (Ensign 153)
Site:	Brininstool 25-23-33 USA	**North Reference:**	Grid
Well:	#2H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	WB1/Job #1410164		
Design:	Plan #1 01-23-14		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10,355.42	0.00	0.00	10,355.42	0.00	0.00	0.00	0.00	0.00	0.00
KOP, 12°/100' Build									
10,400.00	5.35	179.53	10,399.94	-2.08	0.02	2.08	12.00	12.00	0.00
10,500.00	17.35	179.53	10,497.80	-21.72	0.18	21.72	12.00	12.00	0.00
10,600.00	29.35	179.53	10,589.44	-61.28	0.50	61.29	12.00	12.00	0.00
10,700.00	41.35	179.53	10,670.86	-119.03	0.97	119.04	12.00	12.00	0.00
10,800.00	53.35	179.53	10,738.49	-192.45	1.56	192.45	12.00	12.00	0.00
10,900.00	65.35	179.53	10,789.37	-278.32	2.26	278.33	12.00	12.00	0.00
11,000.00	77.35	179.53	10,821.29	-372.89	3.03	372.90	12.00	12.00	0.00
11,100.00	89.35	179.53	10,832.85	-472.03	3.83	472.05	12.00	12.00	0.00
11,101.61	89.54	179.53	10,832.87	-473.65	3.85	473.66	12.00	12.00	0.00
TL, 10837' TVD @ 0' VS w/90.5° Inc									
11,109.58	90.50	179.53	10,832.86	-481.62	3.91	481.63	12.00	12.00	0.00
LP, Hold 90.5° Inc, 179.53° Azm									
11,200.00	90.50	179.53	10,832.07	-572.03	4.64	572.04	0.00	0.00	0.00
11,300.00	90.50	179.53	10,831.20	-672.02	5.46	672.04	0.00	0.00	0.00
11,400.00	90.50	179.53	10,830.33	-772.01	6.27	772.04	0.00	0.00	0.00
11,500.00	90.50	179.53	10,829.46	-872.00	7.08	872.03	0.00	0.00	0.00
11,600.00	90.50	179.53	10,828.58	-972.00	7.89	972.03	0.00	0.00	0.00
11,700.00	90.50	179.53	10,827.71	-1,071.99	8.70	1,072.03	0.00	0.00	0.00
11,800.00	90.50	179.53	10,826.84	-1,171.98	9.52	1,172.02	0.00	0.00	0.00
11,900.00	90.50	179.53	10,825.97	-1,271.98	10.33	1,272.02	0.00	0.00	0.00
12,000.00	90.50	179.53	10,825.09	-1,371.97	11.14	1,372.01	0.00	0.00	0.00
12,100.00	90.50	179.53	10,824.22	-1,471.96	11.95	1,472.01	0.00	0.00	0.00
12,200.00	90.50	179.53	10,823.35	-1,571.95	12.76	1,572.01	0.00	0.00	0.00
12,300.00	90.50	179.53	10,822.48	-1,671.95	13.58	1,672.00	0.00	0.00	0.00
12,400.00	90.50	179.53	10,821.60	-1,771.94	14.39	1,772.00	0.00	0.00	0.00
12,500.00	90.50	179.53	10,820.73	-1,871.93	15.20	1,872.00	0.00	0.00	0.00
12,600.00	90.50	179.53	10,819.86	-1,971.93	16.01	1,971.99	0.00	0.00	0.00
12,700.00	90.50	179.53	10,818.98	-2,071.92	16.82	2,071.99	0.00	0.00	0.00
12,800.00	90.50	179.53	10,818.11	-2,171.91	17.64	2,171.98	0.00	0.00	0.00
12,900.00	90.50	179.53	10,817.24	-2,271.91	18.45	2,271.98	0.00	0.00	0.00
13,000.00	90.50	179.53	10,816.37	-2,371.90	19.26	2,371.98	0.00	0.00	0.00
13,100.00	90.50	179.53	10,815.49	-2,471.89	20.07	2,471.97	0.00	0.00	0.00
13,200.00	90.50	179.53	10,814.62	-2,571.88	20.88	2,571.97	0.00	0.00	0.00
13,300.00	90.50	179.53	10,813.75	-2,671.88	21.70	2,671.96	0.00	0.00	0.00
13,400.00	90.50	179.53	10,812.88	-2,771.87	22.51	2,771.96	0.00	0.00	0.00
13,500.00	90.50	179.53	10,812.00	-2,871.86	23.32	2,871.96	0.00	0.00	0.00
13,600.00	90.50	179.53	10,811.13	-2,971.86	24.13	2,971.95	0.00	0.00	0.00
13,700.00	90.50	179.53	10,810.26	-3,071.85	24.94	3,071.95	0.00	0.00	0.00
13,800.00	90.50	179.53	10,809.39	-3,171.84	25.76	3,171.95	0.00	0.00	0.00
13,900.00	90.50	179.53	10,808.51	-3,271.83	26.57	3,271.94	0.00	0.00	0.00
14,000.00	90.50	179.53	10,807.64	-3,371.83	27.38	3,371.94	0.00	0.00	0.00
14,100.00	90.50	179.53	10,806.77	-3,471.82	28.19	3,471.93	0.00	0.00	0.00
14,200.00	90.50	179.53	10,805.90	-3,571.81	29.00	3,571.93	0.00	0.00	0.00
14,300.00	90.50	179.53	10,805.02	-3,671.81	29.81	3,671.93	0.00	0.00	0.00
14,400.00	90.50	179.53	10,804.15	-3,771.80	30.63	3,771.92	0.00	0.00	0.00
14,500.00	90.50	179.53	10,803.28	-3,871.79	31.44	3,871.92	0.00	0.00	0.00
14,600.00	90.50	179.53	10,802.40	-3,971.78	32.25	3,971.92	0.00	0.00	0.00
14,700.00	90.50	179.53	10,801.53	-4,071.78	33.06	4,071.91	0.00	0.00	0.00
14,800.00	90.50	179.53	10,800.66	-4,171.77	33.87	4,171.91	0.00	0.00	0.00
14,900.00	90.50	179.53	10,799.79	-4,271.76	34.69	4,271.90	0.00	0.00	0.00

Phoenix Technology Services

Planning Report

Database:	GCR DB	**Local Co-ordinate Reference:**	Well #2H
Company:	Chevron	**TVD Reference:**	KB @ 3666.50usft (Ensign 153)
Project:	Lea County NM (NAD27 NME)	**MD Reference:**	KB @ 3666.50usft (Ensign 153)
Site:	Brininstool 25-23-33 USA	**North Reference:**	Grid
Well:	#2H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	WB1/Job #1410164		
Design:	Plan #1 01-23-14		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,000.00	90.50	179.53	10,798.91	-4,371.76	35.50	4,371.90	0.00	0.00	0.00
15,100.00	90.50	179.53	10,798.04	-4,471.75	36.31	4,471.90	0.00	0.00	0.00
15,200.00	90.50	179.53	10,797.17	-4,571.74	37.12	4,571.89	0.00	0.00	0.00
15,300.00	90.50	179.53	10,796.30	-4,671.73	37.93	4,671.89	0.00	0.00	0.00
15,400.00	90.50	179.53	10,795.42	-4,771.73	38.75	4,771.88	0.00	0.00	0.00
15,431.28	90.50	179.53	10,795.15	-4,803.00	39.00	4,803.16	0.00	0.00	0.00
TD at 15431.27 - PBHL-Brininstool 25-23-33 #2H									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL-Brininstool 25-23- - plan hits target center - Rectangle (sides W100.00 H20.00 D4,321.69)	-90.50	179.53	10,795.15	-4,803.00	39.00	462,567.00	749,010.00	32° 16' 8.91858 N	103° 31' 39.75909 W

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
11,101.61	10,832.87	TL, 10837' TVD @ 0' VS w/90.5° Inc		-0.50	179.53

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
10,355.42	10,355.42	0.00	0.00	KOP, 12°/100' Build
11,109.58	10,832.86	-481.62	3.91	LP, Hold 90.5° Inc, 179.53° Azm
15,431.28	10,795.15	-4,803.00	39.00	TD at 15431.27

CONDITIONS OF APPROVAL

Sundry Dated 1/13/2014

OPERATOR'S NAME:	**Chevron U.S.A. INC.**
LEASE NO.:	**NMNM-112940**
WELL NAME & NO.:	**Brininstool 25 23 33 USA 2H - 3002541627**
SURFACE HOLE FOOTAGE:	**0050' FNL & 1980' FWL**
BOTTOM HOLE FOOTAGE	**0330' FSL & 1980' FWL**
LOCATION:	**Section 25, T. 23 S., R 33 E., NMPM**
COUNTY:	**Lea County, New Mexico**

The original COA still applies with the following modifications:
New direction well plan approved

1. The **13-3/8** inch surface casing shall be set at approximately **1400** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. **If salt is encountered, set casing at least 25 feet above the salt.**

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

    b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.

    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

    d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Intermediate casing shall be kept fluid filled while running into hole to meet BLM minimum collapse requirements.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

    ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above.

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

Pilot hole and Pilot hole plug approved as written

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

   ☒ Cement should tie-back at least **500** feet into previous casing string. Operator shall provide method of verification.

4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

A. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. **Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

3. **Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi.**

   a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
   b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
   c. Manufacturer representative shall install the test plug for the initial BOP test.
   d. Operator shall perform the intermediate casing integrity test to 70% of the casing burst. This will test the multi-bowl seals.

e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5M/10M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

    b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.

    c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock.

    d. The results of the test shall be reported to the appropriate BLM office.

    e. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**

    f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

EGF 021014