PHOENIX
TECHNOLOGY SERVICES

March 20, 2014

Oil Conservation Division
State of New Mexico
1625 N. French Drive
Hobbs, New Mexico 88240

HOBBS OCD
MAR 24 2014
RECEIVED

Dear District 1 – Hobbs

Re: Chevron Corporation
Brininstool 25-23-33 WB #2
Lea County, New Mexico
API # 30-025-41617
Job No. 1410164

Enclosed please find the Survey Data Certification, and the original Plat and one copy of the Survey Report pe-rformed on the above referenced Well by Phoenix Technology Services, Inc. (P-5 No. 606018). Other information required by your office is as follows:

Name & Title of Surveyor	Drainhole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Zacharia Dawson	25-23-33	10,600	15,574	03/04/14	03/11/14	MWD

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Best Regards,

Kelly Jo Walter

Kelly Jo Walter
Operations Administrator

Certified mail receipt number: 70111570000143649018

1805 Brittmoore Rd. Houston, TX 77043 • Phone (713) 337-0600 • Fax (713) 337-0599
www.phxtech.com

HOBBS OCD

MAR 2 4 2014

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NEVIS ENERGY SERVICES INC.
SURVEY DATA CERTIFICATION

PHOENIX TECHNOLOGY SERVICES

PHOENIX JOB NUMBER 1410164 OPERATOR Chevron

WELL NAME Brininstool 25-23-33 COUNTY & STATE Lea County NM

API WELL NUMBER	30-025-41617

PROPOSED DIRECTION	179.54

TIE-IN DATA						
MEASURED DEPTH	VERTICAL DEPTH	INCLIN	AZIMUTH	N-S COORD	E-W COORD	DATA SOURCE
10,524 ft	10,515.49 ft	3	109.1	59.91 S	200.90 E	Phoenix MWD

FIRST SURVEY DATE	FIRST SURVEY DEPTH	INCLIN	AZIMUTH
4-Mar-14	10,600 ft	6.1	163.8

SURVEY INSTRUMENT TYPE
Phoenix MWD

LAST SURVEY DATE	LAST SURVEY DEPTH	INCLIN	AZIMUTH
11-Mar-14	15,574 ft	90.5	176

TO THE BEST OF MY KNOWLEDGE I CERTIFY THIS SURVEY DATA TO BE TRUE AND CORRECT.

PROJECTED TD SURVEY DATE	PROJECTED TD SURVEY DEPTH	INCLIN	AZIMUTH
11-Mar-14	15,630 ft	90.5	176

Zak Dawson

PRINT YOUR NAME ABOVE

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	6.81
DECLINATION OR GRID	GRID

3/11/2014

TODAY'S DATE

MWD SUPERVISOR 1 Zak Dawson DIRECTIONAL DRILLER 1 Keith Scheppler

MWD SUPERVISOR 2 Brian Pina DIRECTIONAL DRILLER 2 Craig Cannon

1805 Brittmore Road Houston, Texas 77043 (713)3370609 (Voice), (713)337-0599 (Fax)

Chevron

Chevron

Lea County NM (NAD27 NME)
Brininstool 25-23-33 USA
#2H
WB2/Job #1410164

Survey: Phoenix WB2 MWD Survey

Phoenix Final Survey Report

12 March, 2014

PHOENIX
TECHNOLOGY SERVICES

Company:	Chevron	**Local Co-ordinate Reference:**	Well #2H
Project:	Lea County NM (NAD27 NME)	**TVD Reference:**	KB @ 3666.50usft (Ensign 153)
Site:	Brininstool 25-23-33 USA	**MD Reference:**	KB @ 3666.50usft (Ensign 153)
Well:	#2H	**North Reference:**	Grid
Wellbore:	WB2/Job #1410164	**Survey Calculation Method:**	Minimum Curvature
Design:	Surveys (Ensign 153)	**Database:**	GCR DB

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' 39.79327 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' 39.79327 W
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,642.00 usft

Wellbore WB2/Job #1410164

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010_14	02/07/14	7.24	60.18	48,389

Design Surveys (Ensign 153)

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	10,524.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	179.43

Survey Program **Date** 03/12/14

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.00	1,346.00	Gyro Surveys (WB1/Job #1410164)	MWD	MWD - Standard
1,473.00	10,524.00	Phoenix WB1 MWD Survey (WB1/Job #14	MWD	MWD - Standard
10,524.00	15,630.00	Phoenix WB2 MWD Survey (WB2/Job #14	MWD	MWD - Standard

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
10,524.00	3.00	109.10	10,515.49	-59.91	200.90	61.92	0.00
Tie-on to WB1							
10,600.00	6.10	163.80	10,591.27	-64.44	203.91	66.48	6.58
First Phoenix MWD Survey							
10,644.00	9.10	170.70	10,634.88	-70.12	205.13	72.17	7.11
10,689.00	13.40	175.60	10,679.01	-78.84	206.10	80.90	9.78
10,734.00	18.20	177.40	10,722.30	-91.07	206.82	93.13	10.72
10,779.00	22.30	176.50	10,764.51	-106.61	207.66	108.68	9.14
10,823.00	27.00	176.10	10,804.49	-124.92	208.85	127.00	10.69
10,867.00	33.80	177.30	10,842.41	-147.14	210.11	149.23	15.52

Company:	Chevron	**Local Co-ordinate Reference:**	Well #2H
Project:	Lea County NM (NAD27 NME)	**TVD Reference:**	KB @ 3666.50usft (Ensign 153)
Site:	Brininstool 25-23-33 USA	**MD Reference:**	KB @ 3666.50usft (Ensign 153)
Well:	#2H	**North Reference:**	Grid
Wellbore:	WB2/Job #1410164	**Survey Calculation Method:**	Minimum Curvature
Design:	Surveys (Ensign 153)	**Database:**	GCR DB

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
10,912.00	41.20	180.10	10,878.09	-174.50	210.67	176.60	16.87
10,957.00	46.20	185.80	10,910.63	-205.51	209.00	207.59	14.14
11,002.00	52.00	193.00	10,940.10	-239.00	203.36	241.02	17.66
11,046.00	59.30	197.20	10,964.92	-274.02	193.86	275.94	18.36
11,091.00	67.60	200.40	10,985.02	-312.07	180.86	313.86	19.51
11,138.00	75.70	203.00	10,999.81	-353.47	164.36	355.10	18.01
11,183.00	78.20	203.30	11,009.97	-393.78	147.12	395.23	5.59
11,228.00	80.40	202.90	11,018.32	-434.45	129.78	435.72	4.97
11,272.00	82.20	202.80	11,024.98	-474.52	112.89	475.63	4.10
11,317.00	83.30	202.50	11,030.66	-515.72	95.70	516.65	2.53
11,362.00	85.30	200.70	11,035.13	-557.35	79.22	558.11	5.97
11,407.00	88.20	198.00	11,037.68	-599.73	64.33	600.35	8.80
11,451.00	92.30	194.50	11,037.48	-641.96	52.03	642.45	12.25
11,496.00	91.90	192.10	11,035.84	-685.72	41.68	686.10	5.40
11,586.00	91.60	189.30	11,033.09	-774.10	24.98	774.32	3.13
11,675.00	91.70	186.20	11,030.52	-862.24	12.99	862.33	3.48
11,764.00	91.20	183.60	11,028.27	-950.88	5.39	950.89	2.97
11,854.00	90.20	180.70	11,027.17	-1,040.80	2.01	1,040.77	3.41
11,943.00	92.00	178.40	11,025.46	-1,129.77	2.71	1,129.74	3.28
12,033.00	92.60	177.50	11,021.85	-1,219.64	5.93	1,219.64	1.20
12,122.00	92.90	176.80	11,017.58	-1,308.43	10.35	1,308.47	0.85
12,212.00	91.80	178.30	11,013.89	-1,398.27	14.19	1,398.34	2.07
12,301.00	91.70	178.30	11,011.17	-1,487.19	16.83	1,487.28	0.11
12,390.00	92.50	180.30	11,007.91	-1,576.11	17.92	1,576.21	2.42
12,479.00	93.10	180.00	11,003.56	-1,665.01	17.68	1,665.10	0.75
12,569.00	93.40	179.20	10,998.46	-1,754.86	18.31	1,754.95	0.95
12,658.00	92.00	180.00	10,994.27	-1,843.76	18.93	1,843.85	1.81
12,748.00	91.70	179.40	10,991.36	-1,933.71	19.40	1,933.80	0.75
12,837.00	92.10	178.60	10,988.41	-2,022.64	20.95	2,022.75	1.00
12,927.00	92.40	178.10	10,984.88	-2,112.54	23.54	2,112.67	0.65
13,016.00	93.00	178.70	10,980.69	-2,201.40	26.03	2,201.55	0.95
13,105.00	91.70	180.20	10,977.04	-2,290.32	26.88	2,290.47	2.23
13,194.00	91.80	180.60	10,974.32	-2,379.27	26.26	2,379.42	0.46
13,284.00	90.00	182.20	10,972.90	-2,469.23	24.06	2,469.35	2.68
13,374.00	89.70	182.30	10,973.14	-2,559.16	20.53	2,559.24	0.35
13,463.00	89.90	182.20	10,973.45	-2,648.09	17.03	2,648.13	0.25
13,553.00	90.70	180.80	10,972.98	-2,738.06	14.68	2,738.07	1.79
13,642.00	91.00	180.70	10,971.66	-2,827.04	13.51	2,827.03	0.36
13,732.00	91.10	180.10	10,970.01	-2,917.02	12.88	2,917.00	0.68
13,821.00	92.00	179.60	10,967.60	-3,005.99	13.12	3,005.97	1.16
13,910.00	92.30	179.80	10,964.26	-3,094.92	13.58	3,094.90	0.41
14,000.00	92.70	179.70	10,960.34	-3,184.84	13.97	3,184.82	0.46
14,089.00	92.80	179.60	10,956.07	-3,273.73	14.52	3,273.71	0.16
14,179.00	91.70	179.90	10,952.53	-3,363.66	14.91	3,363.64	1.27

Company:	Chevron	**Local Co-ordinate Reference:**	Well #2H
Project:	Lea County NM (NAD27 NME)	**TVD Reference:**	KB @ 3666.50usft (Ensign 153)
Site:	Brininstool 25-23-33 USA	**MD Reference:**	KB @ 3666.50usft (Ensign 153)
Well:	#2H	**North Reference:**	Grid
Wellbore:	WB2/Job #1410164	**Survey Calculation Method:**	Minimum Curvature
Design:	Surveys (Ensign 153)	**Database:**	GCR DB

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
14,268.00	89.50	180.20	10,951.60	-3,452.65	14.83	3,452.63	2.49
14,358.00	88.90	180.30	10,952.86	-3,542.64	14.44	3,542.61	0.68
14,447.00	89.30	179.60	10,954.26	-3,631.63	14.52	3,631.59	0.91
14,537.00	89.40	180.00	10,955.28	-3,721.62	14.83	3,721.58	0.46
14,626.00	89.00	179.50	10,956.52	-3,810.61	15.22	3,810.57	0.72
14,715.00	88.90	179.30	10,958.15	-3,899.59	16.15	3,899.56	0.25
14,805.00	89.20	179.60	10,959.64	-3,989.57	17.01	3,989.55	0.47
14,894.00	89.60	179.60	10,960.58	-4,078.57	17.64	4,078.54	0.45
14,984.00	89.80	179.10	10,961.05	-4,168.56	18.66	4,168.54	0.60
15,073.00	90.30	178.50	10,960.97	-4,257.54	20.52	4,257.53	0.88
15,163.00	90.20	178.00	10,960.58	-4,347.50	23.27	4,347.51	0.57
15,252.00	89.80	176.80	10,960.58	-4,436.40	27.31	4,436.45	1.42
15,342.00	90.20	177.70	10,960.58	-4,526.30	31.62	4,526.39	1.09
15,431.00	90.40	177.30	10,960.11	-4,615.21	35.51	4,615.34	0.50
15,521.00	90.50	176.20	10,959.40	-4,705.06	40.61	4,705.23	1.23
15,574.00	90.50	176.00	10,958.94	-4,757.94	44.21	4,758.14	0.38
Last Phoenix MWD Survey							
15,630.00	90.50	176.00	10,958.45	-4,813.80	48.12	4,814.04	0.00
Projection to TD							

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
10,524.00	10,515.49	-59.91	200.90	Tie-on to WB1
10,600.00	10,591.27	-64.44	203.91	First Phoenix MWD Survey
15,574.00	10,958.94	-4,757.94	44.21	Last Phoenix MWD Survey
15,630.00	10,958.45	-4,813.80	48.12	Projection to TD

Checked By: _____ Approved By: _____ Date: _____

Project: Lea County NM (NAD27 NME)
Site: Brininstool 25-23-33 USA
Well: #2H
Wellbore: WB2/Job #1410164
Design: Plan #3 03-05-14
Rig: Ensign 153

PHOENIX TECHNOLOGY SERVICES

Azimuths to Grid North
True North: -0.43°
Magnetic North: 6.81°

Magnetic Field
Strength: 48389.4snT
Dip Angle: 60.18°
Date: 02/07/2014
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	10779.00	22.30	176.50	10764.51	-106.61	207.66	0.00	0.00	108.30		Tie-on to 10779' MD
2	10832.00	27.20	178.00	10812.62	-128.77	208.70	9.32	7.99	130.46		PTB, 14.70°/100' Build
3	11283.68	91.50	200.00	11032.79	-484.86	125.57	14.70	24.12	485.87		LP Begin 3°/100' Turn
4	11965.01	91.50	179.55	11014.77	-1152.50	10.53	3.00	-89.73	1152.55		Hold 91.50° Inc, 179.54° Azm
5	15616.87	91.50	179.55	10919.30	-4803.00	39.00	0.00	0.00	4803.16	PBHL-Brininstool 25-23-33 #2H v3	

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL-Brininstool 25-23-33 #2H v3 - plan hits target center	10919.30	-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: 07-Feb-14
Magnetic Declination: 7.24°
Dip Angle from Horizontal: 60.18°
Magnetic Field Strength: 48389

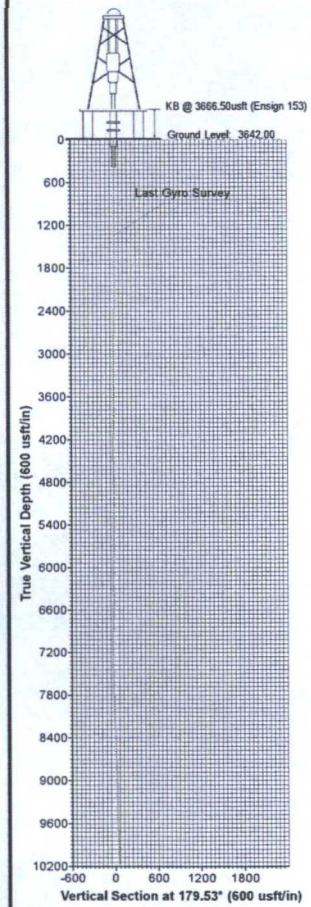
To convert a Magnetic Direction to a Grid Direction, Add 6.81°
To convert a Magnetic Direction to a True Direction, Add 7.24° East
To convert a True Direction to a Grid Direction, Subtract 0.43°

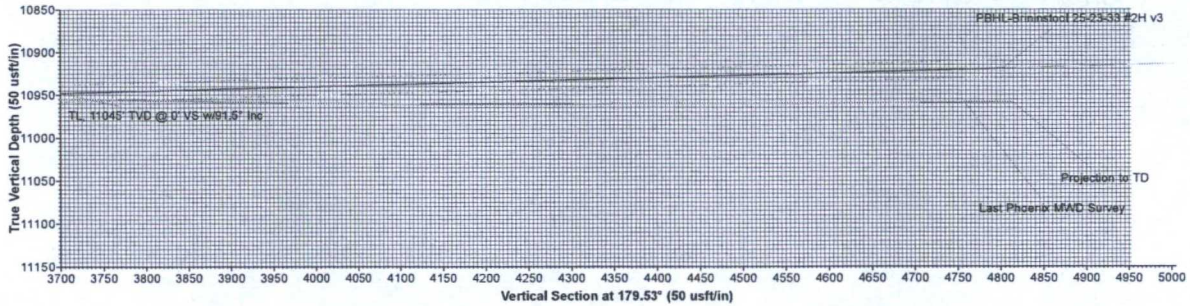
FORMATION TOP DETAILS

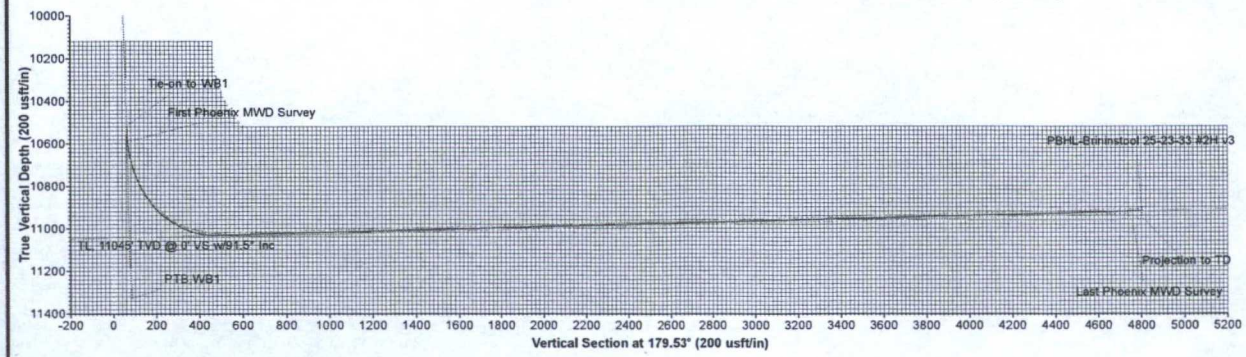
TVDPath	MDPath	Formation	DipAngle	DipDir
11032.79	11262.88	TL, 11045' TVD @ 0' VS w/91.5° Inc	-1.50	179.53

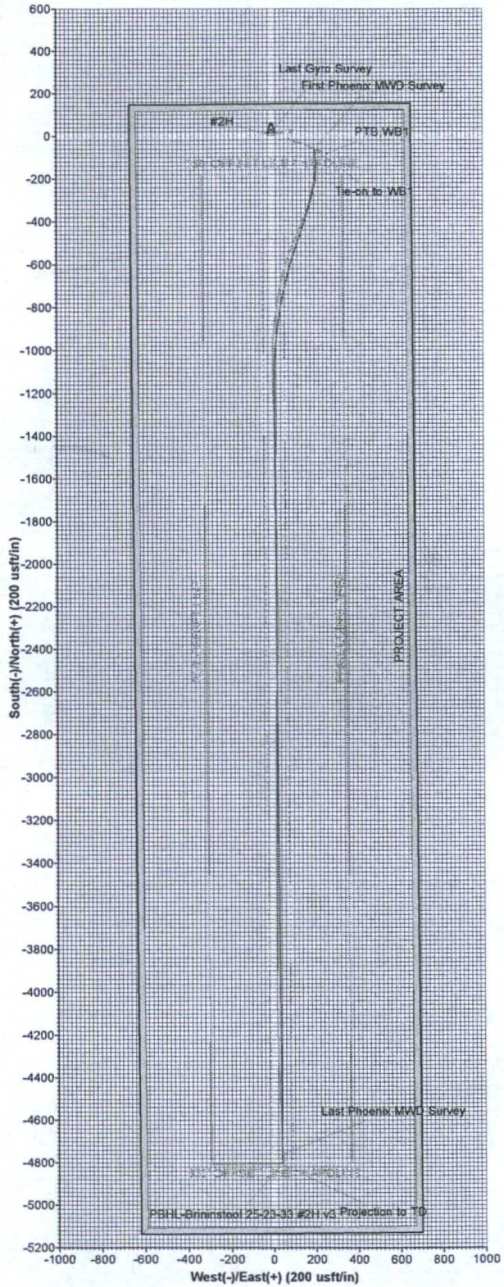
LEGEND

#2H, WB2/Job #1410164, Surveys (Ensign 153) V0
#2H, WB1/Job #1410164, Surveys (Ensign 153) V0
Plan #3 03-05-14









Created By: Julio Piña Date: 9:14, March 12 2014