



PHOENIX
TECHNOLOGY SERVICES

March 20, 2014

HOBBS OCD

MAR 24 2014

RECEIVED

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

Dear District 1 – Hobbs

Re: Chevron Corporation
Brininstool 25-23-33
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 performed 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	1,473	11,288	02/16/14	02/27/14	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: 7011 1570 0001 4364 9018

NEVIS ENERGY SERVICES INC. SURVEY DATA CERTIFICATION

HOBBS OCD

MAR 24 2014



PHOENIX JOB NUMBER 1410164

OPERATOR Chevron
RECEIVED

WELL NAME Brininstool 25-23-33

COUNTY & STATE

Lea County NM

API WELL NUMBER	30-025-41617
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PROPOSED DIRECTION	179.54
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TIE-IN DATA						
MEASURED	VERTICAL			N-S	E-W	DATA
DEPTH	DEPTH	INCLIN	AZIMUTH	COORD	COORD	SOURCE
1,346 ft	2.1 ft	0.03	97.67	2.20S	11.79W	Gyro

FIRST SURVEY DATE	FIRST SURVEY DEPTH	INCLIN	AZIMUTH
16-Feb-14	1,473 ft	0.6	92.8

SURVEY INSTRUMENT TYPE
Phoenix MWD

LAST SURVEY DATE	LAST SURVEY DEPTH	INCLIN	AZIMUTH
27-Feb-14	11,288 ft	8.5	119.1

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
27-Feb-14	11,340 ft	8.5	119.1

Zak Dawson

PRINT YOUR NAME ABOVE

Zak Dawson

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	6.81
DECLINATION OR GRID	GRID

2/27/2014

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

Lea County NM (NAD27 NME)

Brininstool 25-23-33 USA

#2H

WB1/Job #1410164

Survey: Phoenix WB1 MWD Survey

Phoenix Final Survey Report

12 March, 2014





Phoenix Technology Services
Phoenix Final Survey Report



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:	WB1/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	WB1/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:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.00	0.00	0.00	179.53	

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	11,340.00	Phoenix WB1 MWD Survey (WB1/Job #14)	MWD	MWD - Standard

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
1,346.00	0.03	97.67	1,345.92	-2.20	-11.79	2.10	0.00	
1,473.00	0.60	92.80	1,472.92	-2.24	-11.09	2.15	0.45	
1,652.00	0.60	67.00	1,651.91	-1.92	-9.29	1.84	0.15	
1,831.00	0.80	75.40	1,830.90	-1.24	-7.22	1.18	0.13	
2,010.00	1.20	79.50	2,009.87	-0.58	-4.17	0.54	0.23	
2,189.00	1.40	77.80	2,188.82	0.23	-0.19	-0.23	0.11	
2,368.00	1.60	75.40	2,367.76	1.32	4.37	-1.28	0.12	
2,546.00	1.90	72.70	2,545.68	2.82	9.59	-2.74	0.17	
2,725.00	2.40	70.10	2,724.55	4.98	15.95	-4.85	0.28	
2,904.00	2.80	67.70	2,903.37	7.91	23.52	-7.72	0.23	
3,083.00	1.70	89.70	3,082.23	9.59	30.22	-9.34	0.77	



Phoenix Technology Services
Phoenix Final Survey Report



Company: Chevron
Project: Lea County NM (NAD27 NME)
Site: Brininstool 25-23-33 USA
Well: #2H
Wellbore: WB1/Job #1410164
Design: Surveys (Ensign 153)

Local Co-ordinate Reference: Well #2H
TVD Reference: KB @ 3666.50usft (Ensign 153)
MD Reference: KB @ 3666.50usft (Ensign 153)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: GCR DB

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
3,262.00	1.90	82.90	3,261.14	9.97	35.82	-9.67	0.16
3,440.00	2.20	83.40	3,439.03	10.72	42.14	-10.38	0.17
3,619.00	1.50	74.00	3,617.93	11.77	47.81	-11.37	0.42
3,798.00	1.60	56.90	3,796.87	13.78	52.15	-13.35	0.26
3,977.00	2.00	60.90	3,975.78	16.66	56.97	-16.19	0.23
4,156.00	2.30	67.10	4,154.65	19.58	63.01	-19.06	0.21
4,335.00	3.00	74.10	4,333.46	22.26	70.83	-21.68	0.43
4,514.00	1.40	135.70	4,512.34	21.98	76.86	-21.34	1.47
4,693.00	1.80	126.30	4,691.27	18.75	80.65	-18.08	0.27
4,872.00	2.90	120.80	4,870.12	14.76	86.81	-14.05	0.63
5,051.00	1.40	68.90	5,049.00	13.23	92.74	-12.47	1.29
5,094.00	1.30	73.30	5,091.99	13.56	93.69	-12.79	0.33
5,289.00	1.20	79.70	5,286.95	14.56	97.82	-13.76	0.09
5,468.00	1.20	76.10	5,465.91	15.35	101.49	-14.51	0.04
5,647.00	1.00	37.10	5,644.88	17.04	104.25	-16.19	0.42
5,826.00	1.10	48.50	5,823.85	19.43	106.48	-18.55	0.13
6,005.00	1.20	44.40	6,002.81	21.91	109.08	-21.01	0.07
6,183.00	0.50	107.60	6,180.79	23.00	111.12	-22.09	0.60
6,362.00	0.80	136.10	6,359.78	21.87	112.73	-20.94	0.24
6,541.00	1.20	301.60	6,538.77	21.95	112.00	-21.03	1.11
6,720.00	1.50	295.80	6,717.72	23.95	108.29	-23.06	0.18
6,900.00	1.10	288.00	6,897.67	25.51	104.53	-24.65	0.24
7,079.00	1.10	291.90	7,076.64	26.68	101.30	-25.85	0.04
7,258.00	1.60	265.60	7,255.59	27.13	97.22	-26.33	0.44
7,437.00	1.80	255.80	7,434.51	26.25	92.00	-25.49	0.20
7,616.00	1.80	219.50	7,613.43	23.39	87.49	-22.67	0.63
7,795.00	1.70	207.80	7,792.35	18.87	84.46	-18.18	0.21
7,974.00	2.20	209.10	7,971.24	13.52	81.55	-12.85	0.28
8,153.00	2.20	195.60	8,150.11	7.21	78.96	-6.56	0.29
8,332.00	2.00	182.90	8,328.99	0.78	77.87	-0.14	0.28
8,511.00	2.20	167.60	8,507.88	-5.69	78.45	6.34	0.33
8,690.00	2.20	151.60	8,686.75	-12.07	80.82	12.74	0.34
8,869.00	2.80	129.10	8,865.58	-17.85	85.85	18.56	0.64
9,047.00	2.20	111.30	9,043.41	-21.84	92.41	22.59	0.55
9,226.00	2.80	116.20	9,222.24	-25.01	99.53	25.83	0.36
9,405.00	4.60	104.50	9,400.86	-28.74	110.41	29.65	1.09
9,583.00	5.40	97.80	9,578.18	-31.67	125.62	32.69	0.56
9,762.00	6.60	106.30	9,756.20	-35.70	143.83	36.87	0.83
9,941.00	5.30	119.00	9,934.24	-42.59	160.94	43.91	1.03
9,988.00	5.10	117.90	9,981.05	-44.62	164.68	45.97	0.48
10,167.00	5.80	109.20	10,159.24	-51.32	180.26	52.80	0.60
10,346.00	2.80	118.00	10,337.72	-56.35	192.66	57.93	1.71
10,524.00	3.00	109.10	10,515.49	-59.91	200.90	61.56	0.28
10,703.00	4.30	105.40	10,694.13	-63.23	211.80	64.96	0.74



Phoenix Technology Services
Phoenix Final Survey Report



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Well:	#2H	North Reference:	Grid
Wellbore:	WB1/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)
10,882.00	3.80	112.70	10,872.68	-67.30	223.74	69.13	0.40
11,061.00	3.40	107.50	11,051.33	-71.18	234.28	73.10	0.29
11,188.00	6.60	113.90	11,177.83	-75.27	244.54	77.28	2.55
11,288.00	8.50	119.10	11,276.96	-81.20	256.26	83.30	2.02
11,340.00	8.50	119.10	11,328.39	-84.94	262.97	87.09	0.00
PTB,WB1							

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
11,340.00	11,328.39	-84.94	262.97	PTB,WB1

Checked By: _____ Approved By: _____ Date: _____