Results of Directional Survey

DD

API number:	30-025-40032		
OGRID:		Operator:	CONOCOPHILLIPS COMPANY
		Property:	EAST VACUUM (GSA) UNIT # 507

surface	ULSTR:	G	33	T	17S	R	35E
				2517	FNL	2166	FEL
BH Loc	ULSTR:	J	33	T	17S	R	35E
5350 MD		5155.3 TVD		2260	FSL	1464	FEL
				3020	FNL		
Top Perf/OH	ULSTR:	J	33	T	17S	R	35E
4759 MD		4633.6 TVD		2422	FSL	1689	FEL
				2858	FNL		
Bot Perf/OH	ULSTR:	J	33	T	17S	R	35E
4846 MD		4710.4 TVD		2399	FNL	1655	FEL
				2881	FNL		

	MD	N/S	E/W	TVD
	4756	-340.50	475.70	4631
TOP PERFS/OH	**4759**	-341.28	476.89	4633.64
	4802	-352.50	494.00	4671.50
	4802	-352.50	494.00	4671.50
BOT PERFS/OH	**4846**	-363.65	511.31	4710.42
	4847	-363.90	511.70	4711.30

NEXT TO LAST	5303	-489.50	686.60	5112.90
LAST READING	5350	-502.60	702.10	5155.30
TD	**5350**	-502.60	702.10	5155.30

Surface Location	2517	FN	2166	FE
Projected BHL	3020	FN	1464	FE
Location of				
Top Perfs/OH	2858	FN	1689	FE
Bottom Perfs/OH	2881	FN	1655	FE

SUMMARY of Subsurface Locations

Surface Location	G-33-17S-35E	2517	FN	2166	FE	Vert. Depth
Top Perfs/OH	J-33-17S-35E	2858	FN	1689	FE	4633.64
Bottom Perfs/OH	J-33-17S-35E	2881	FN	1655	FE	4710.42
Projected TD	J-33-17S-35E	3020	FN	1464	FE	5155.30

MAY 0 8 2012

Bottom Copy

Mid-Con Field Supt

HOBBS OCD

FEB 0 3 2012

RECEIVED

NEW MEXICO INCLINATION REPORT

1. FIELD NAME	2 LEASE NAME	8 Well Number
EAST VACUUM; GBSA UNIT	EV GBSA UNIT 3315W	#507
3. OPERATOR		
CONOCO PHILLIPS COMPANY		
4 ADDRESS		10. County
ATTN; JALYN N. FISKE, 3300 NORTH "A" STREET BUILDING 6, MIDLAND TX, 79705		LEA
5 LOCATION		
SECTION 33, TOWNSHIP 17 SOUTH, RANGE 35 EAST		

RECORD OF INCLINATION

*11. Measured Depth (feet)	12 Course Length (Hundreds of feet)	*13. Angle of Inclination (Degrees)	14 Displacement per Hundred Feet (Sine of Angle x100)	15. Course Displacement (feet)	16 Accumulative Displacement (feet)
1605	16.05	0.50	0.87	14.01	14.01
1809	2.04	0.36	0.63	1 28	15.29
2172	3.63	0.95	1.66	6.02	21.31
2584	4.12	0.60	1.05	4.31	25.62
2990	4.06	1.05	1.83	7.44	33.06
3306	3.16	8.44	14.68	46.38	79.44
3351	0.45	9.98	17.33	7.80	87.24
3397	0.46	11.45	19.85	9.13	96.37
3487	0.90	12.71	22.00	19.80	116.17
3531	0.44	14.41	24.89	10 95	127.12
3576	0.45	15.62	26.93	12.12	139.24
3669	0.93	18.15	31.15	28 97	168.21
3759	0.90	20.71	35.36	31.83	200.04
3849	0.90	22.70	38.59	34.73	234.77
3941	0.92	24.14	40.90	37.63	272.40
4031	0.90	26.02	43.87	39.48	311.88
4167	1.36	27.89	46.78	63.62	375.50
4393	2.26	28.47	47.67	107.73	483.23
4620	2.27	27.54	46.24	104.96	588.19
4711	0 91	28.80	48.18	43.84	632.03
4892	1 81	28.84	48.24	87.31	719.34
4938	0.46	29.89	49.83	22.92	742.26
4983	0.45	30.46	50.69	22.81	765.07
5074	0.91	28.62	47.90	43.59	808.66
5165	0.91	28.39	47 55	43 27	851.93
5303	1 38	25.55	43.13	59.52	911.45

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 10th DAY OF OCTOBER, 2011

*** THIS WELL WAS DIRECTIONALLY DRILLED

STATE OF TEXAS
COUNTY OF HARRIS

ROBERT J.C. BIGHAM
RIG MANAGER
PRECISION DRILLING COMPANY L.P.
RIG 194

Notary Public State of Texas
BELINDA G. SMITHWICK
My Commission Expires
August 15, 2014

Belinda G. Smithwick

William Turner
Mid-Con Field Supt

SUR: G-33-17s-35e, 2517/N & 2166/E
BHL: J-33-17s-35e, 3020/N & 1464/E
API # 30-025-40032

CONOCOPHILLIPS

Vacuum Gb/SA
Lea County, NM
East Vacuum Gb/SA Unit 3315W #507
VH - Job #32K0611552

SUR: G-33-17s-35e, 2517/N & 2166/E
BHL: J-33-17s-35e, 3020/N & 1464/E
API # 30-025-40032

Survey: Actual

SDI Standard Survey Report

This survey is correct to the best of my knowledge and is supported by actual field data.

Notarized this date 1st of August, 2011.

Notary Signature
County of Midland
State of Texas

NOTARY PUBLIC STATE OF TEXAS
CARRIE REED
My Commission Expires
October 4, 2011

Scientific Drilling
Directional Drilling Operations

Scientific Drilling International, Inc.

SDI Standard Survey Report

Scientific Drilling
Directional Drilling Operations

Company:	CONOCOPHILLIPS	**Local Co-ordinate Reference:**	Well East Vacuum Gb/SA Unit 3315W #507
Project:	Vacuum Gb/SA	**TVD Reference:**	WELL @ 0.0usft (Original Well Elev)
Site:	Lea County, NM	**MD Reference:**	WELL @ 0 0usft (Original Well Elev)
Well:	East Vacuum Gb/SA Unit 3315W #507	**North Reference:**	Grid
Wellbore:	VH - Job #32K0611552	**Survey Calculation Method:**	Minimum Curvature
Design:	VH - Job #32K0611552	**Database:**	EDM-Regulatory

Project Vacuum Gb/SA

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico Central 3002		

Site Lea County, NM

Site Position:		**Northing:**	667,751.74 usft	**Latitude:**	32° 48' 14 400 N
From:	Lat/Long	**Easting:**	1,366,301 56 usft	**Longitude:**	103° 25' 51 600 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16"	**Grid Convergence:**	1 53 °

Well East Vacuum Gb/SA Unit 3315W #507, Directional

Well Position	**+N/-S**	0.0 usft	**Northing:**	662,985.02 usft	**Latitude:**	32° 47' 29.640 N
	+E/-W	0.0 usft	**Easting:**	1,357,330.21 usft	**Longitude:**	103° 27' 38 060 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	0 0 usft

Wellbore VH - Job #32K0611552

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/13/2011	7.58	60 73	48,998

Design VH - Job #32K0611552

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0 0	0 0	0 0	125.14

Survey Program **Date** 8/15/2011

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100 0	1,458.0	Actual (VH - Job #32K0611552)	Keeper	Keeper Gyro

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
0.0	0.00	0.00	0 0	0 0	0 0	0 00	0 0
100 0	0.24	338.02	100 0	0.2	-0.1	338.02	0 2
200 0	0 31	333.47	200 0	0.6	-0 3	336.23	0.7
300.0	0.15	7.94	300.0	1.0	-0 4	339 22	1 1
400.0	0.30	14 44	400 0	1 4	-0 3	347 90	1.4
500 0	0 45	27 64	500.0	2 0	0.0	358 57	2.0
600 0	0 31	31 83	600.0	2 6	0.3	6 13	2.6
700.0	0 53	66 56	700.0	3 0	0.8	15.79	3 1
800 0	0 65	44.49	800 0	3.6	1 7	25.01	3 9
900.0	0.31	82 88	900 0	4.0	2 3	30 19	4.6
1,000 0	0.14	117 84	1,000 0	4.0	2 7	34 21	4.8
1,100 0	0 24	147.47	1,100 0	3.7	2 9	37 99	4 8

Company:	CONOCOPHILLIPS	**Local Co-ordinate Reference:**	Well East Vacuum Gb/SA Unit 3315W #507
Project:	Vacuum Gb/SA	**TVD Reference:**	WELL @ 0 0usft (Original Well Elev)
Site:	Lea County, NM	**MD Reference:**	WELL @ 0 0usft (Original Well Elev)
Well:	East Vacuum Gb/SA Unit 3315W #507	**North Reference:**	Grid
Wellbore:	VH - Job #32K0611552	**Survey Calculation Method:**	Minimum Curvature
Design:	VH - Job #32K0611552	**Database:**	EDM-Regulatory

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
1,200 0	0.15	131 85	1,200 0	3.5	3 1	42 00	4 7
1,300 0	0 13	210.12	1,300.0	3.3	3 2	43.93	4 6
1,400 0	0.03	177.49	1,400.0	3 2	3 1	44 53	4 5
1,458.0	0 37	196.12	1,458 0	3 0	3.1	45 87	4.3

Scientific Drilling
Directional Drilling Operations

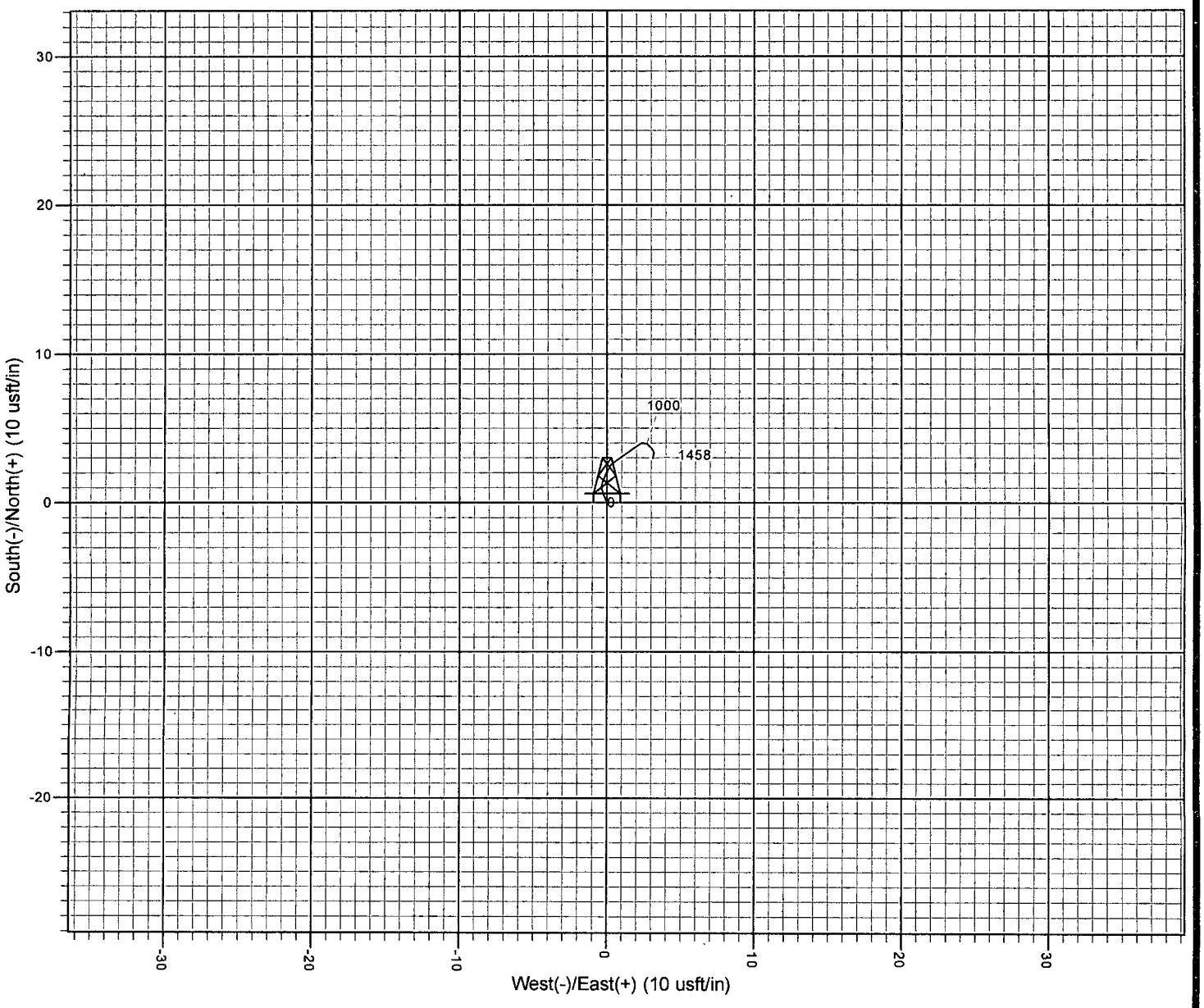
Project: Vacuum Gb/SA
Lea County, NM
Well: East Vacuum Gb/SA Unit 3315W #507
Wellbore: VH - Job #32K0611552
Design: VH - Job #32K0611552

Azimuths to Grid North
True North: -1.51°
Magnetic North: 6.07°

Magnetic Field
Strength: 48997.8snT
Dip Angle: 60.73°
Date: 6/13/2011
Model: IGRF2010

WELL DETAILS: East Vacuum Gb/SA Unit 3315W #507
WELL @ 0.0usft (Original Well Elev)
Ground Level: 0.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	662985.02	1357330.21	32° 47' 29.640 N	103° 27' 38.060 W	



PROJECT DETAILS: Vacuum Gb/SA
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico Central 3002
System Datum: Mean Sea Level

SITE DETAILS: Lea County, NM
Site Centre Latitude: 32° 48' 14.400 N
Longitude: 103° 25' 51.600 W
Positional Uncertainity: 0.0
Convergence: 1.53
Local North: Grid

Scientific Drilling
Directional Drilling Operations

Project: Lea County, NM (NAD27 NME)
Site: EAST VACUUM UNIT
Well: EVGBSAU 3315W-507
Wellbore: Wellbore #1
Design: ACTUAL SURVEY (EVGBSAU 3315W-507/Wellbore #1)

ConocoPhillips

SURVEY PROGRAM

Date: 2011-06-15T00:00:00 Validated: Yes Version:

Depth From	Depth To	Survey/Plan	Tool
100 0	1458 0	Gyro Survey (Wellbore #1)	CB-GYRO-MS
1628 0	5350 0	MWD Survey (Wellbore #1)	MWD

LEGEND

EVGBSAU 3315W-507, Wellbore #1, plan 2 tied to gyro (2.0)
ACTUAL SURVEY

G
T M
Azimuths to Grid North
True North: 0.47°
Magnetic North: 7.15°
Magnetic Field
Strength: 48005.7nT
Dip Angle: 60.74°
Date: 05/20/2011
Model: BGGM2010

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
TARGET @ 4905'TVD	4905.0	-420 6	597 6	652369 00	768803 00	32° 47' 25.433 N	103° 27' 31 103 W	Circle (Radius. 50.0)

PROJECT DETAILS: Lea County, NM (NAD27 NME)

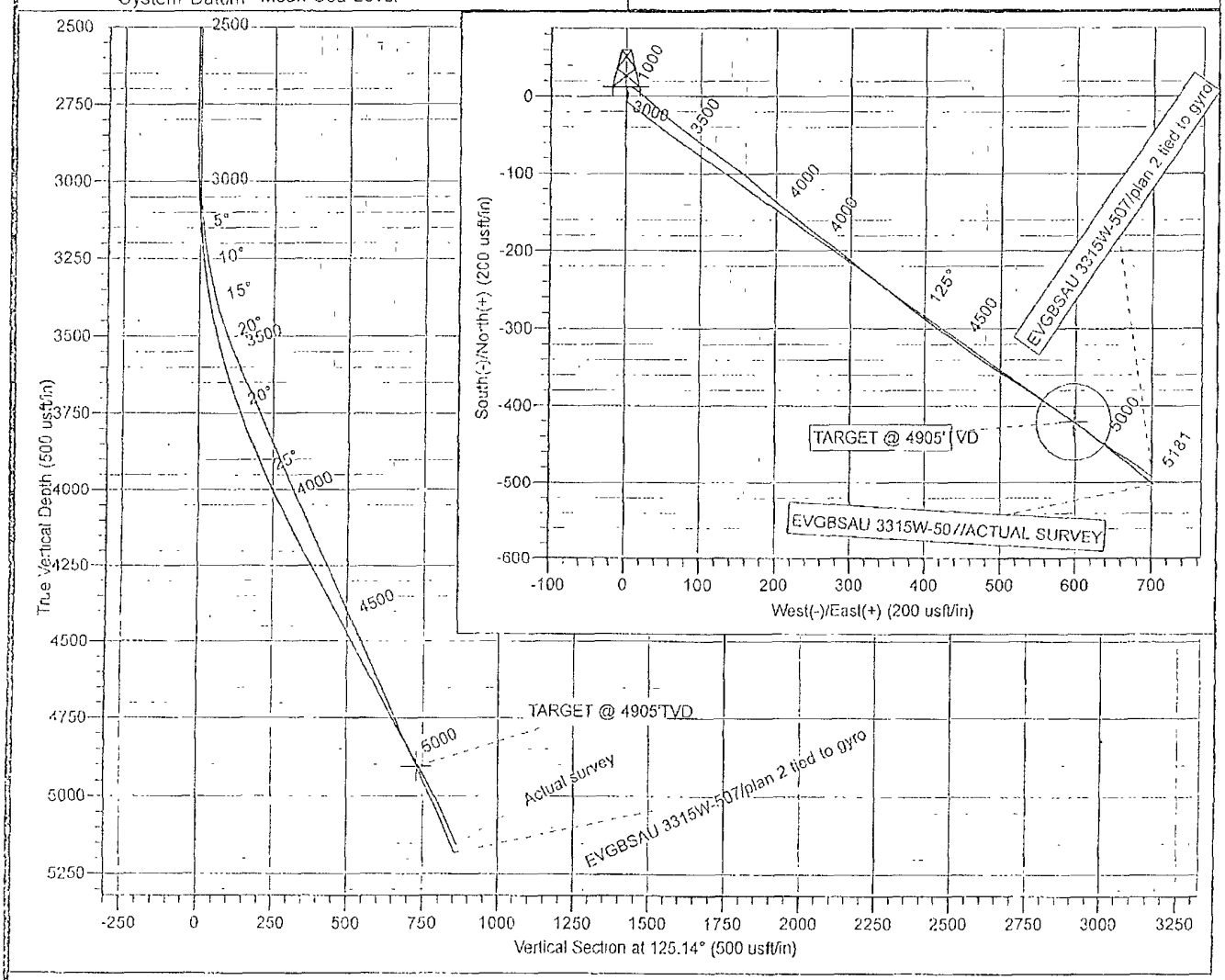
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001

System Datum: Mean Sea Level

WELL DETAILS: EVGBSAU 3315W-507

Ground Level: 3944.0

Northing	Easting	Latitude	Longitude
652789.60	768205.40	32° 47' 29.643 N	103° 27' 38.063 W

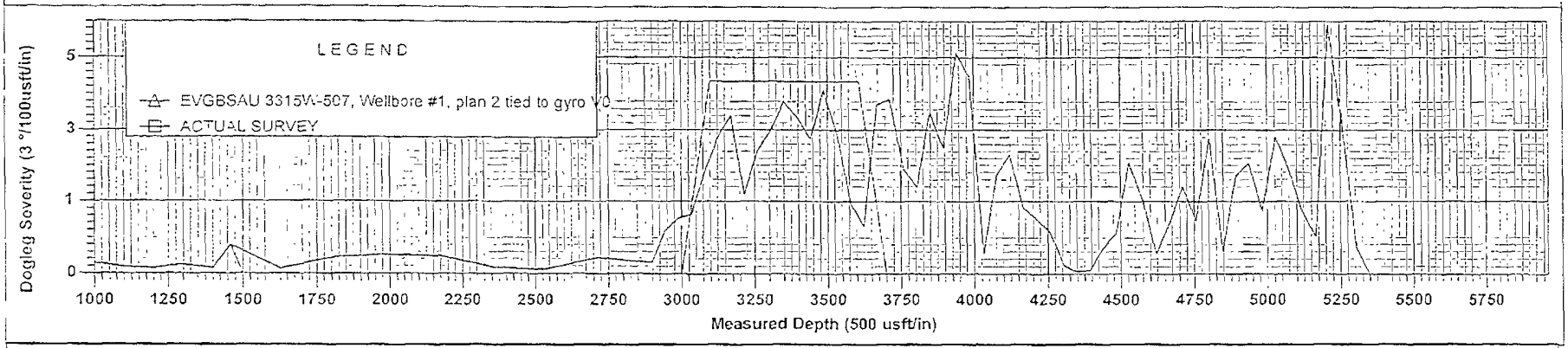


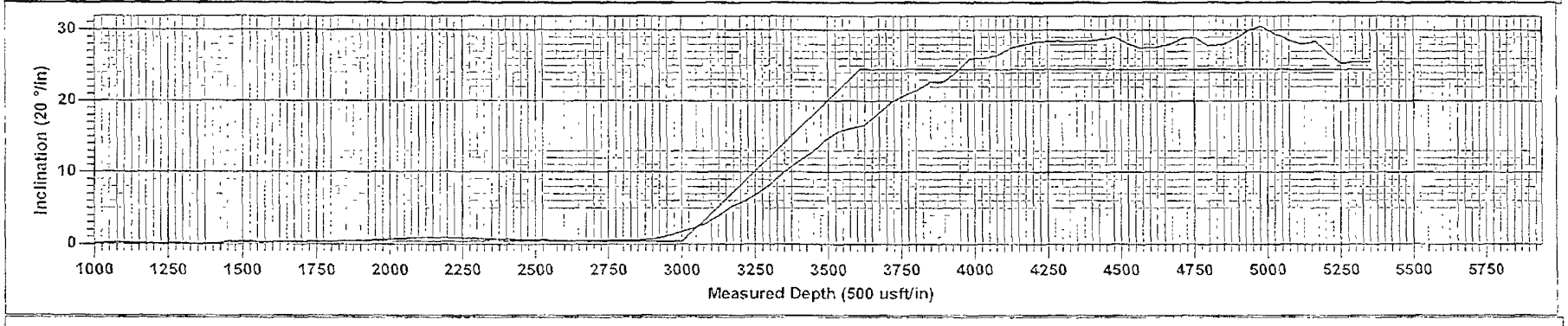
SUR: G-33-17s-35e, 2517/N & 2166/E
BHL: J-33-17s-35e, 3020/N & 1464/E
API # 30-025-40032

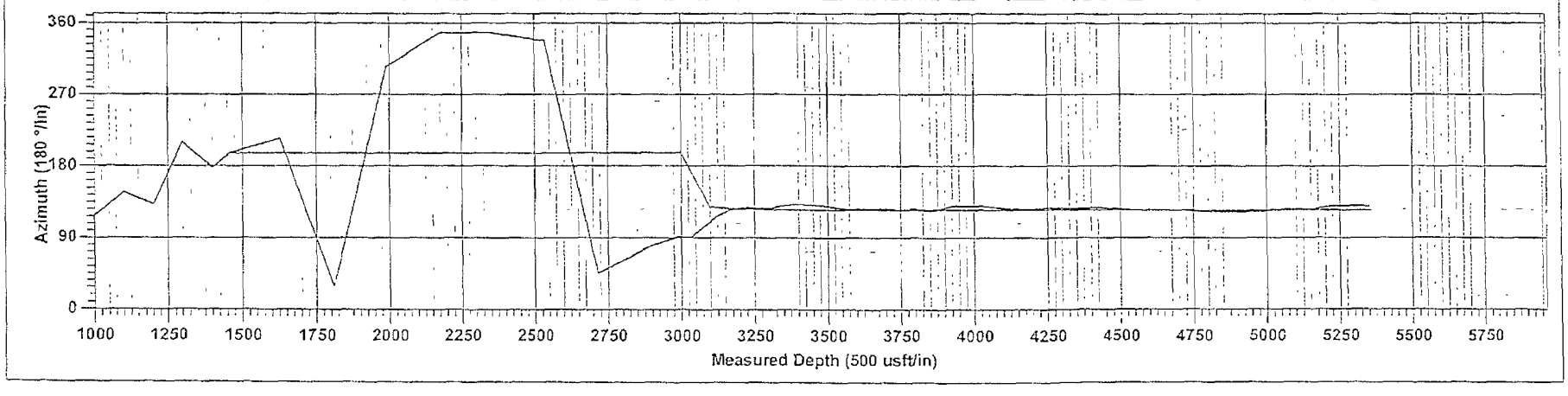
Scientific Drilling
Directional Drilling Operations

Lea County, NM (NAD27 NME)
Site: EAST VACUUM UNIT
Well: EVGBSAU 3315W-507
Wellbore #1
Design: ACTUAL SURVEY (EVGBSAU 3315W-507/Wellbore #1)

ConocoPhillips







CONOCOPHILLIPS

Lea County, NM (NAD27 NME)
EAST VACUUM UNIT
EVGBSAU 3315W-507

SUR: G-33-17s-35e, 2517/N & 2166/E
BHL: J-33-17s-35e, 3020/N & 1464/E
API # 30-025-40032

Wellbore #1

Design: ACTUAL SURVEY

Standard Survey Report

18 June, 2011

Scientific Drilling International

Survey Report

Company:	CONOCOPHILLIPS	Local Co-ordinate Reference:	Well EVGBSAU 3315W-507
Project:	Lea County, NM (NAD27 NME)	TVD Reference:	WELL @ 3966.0usft (Original Well Elev)
Site:	EAST VACUUM UNIT	MD Reference:	WELL @ 3966.0usft (Original Well Elev)
Well:	EVGBSAU 3315W-507	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	ACTUAL SURVEY	Database:	EDM 5000.1 Single User 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	EAST VACUUM UNIT				
Site Position:		Northing:	651,854.60 usft	Latitude:	32° 47' 20.398 N
From:	Map	Easting:	766,132.80 usft	Longitude:	103° 27' 39.003 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.47 °

Well	EVGBSAU 3315W-507					
Well Position	+N/-S	0.0 usft	Northing:	652,789.60 usft	Latitude:	32° 47' 29.643 N
	+E/-W	0.0 usft	Easting:	768,205.40 usft	Longitude:	103° 27' 38.063 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	3,966.0 usft	Ground Level:	3,944.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	06/09/11	7.62	60.74	49,006

Design	ACTUAL SURVEY					
Audit Notes:						
Version:	1.0	Phase:	ACTUAL	Tie On Depth:		0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)		
	0.0	0.0	0.0	125.14		

Survey Program	Date 06/18/11			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	1,458.0	Gyro Survey (Wellbore #1)	CB-GYRO-MS	Camera based gyro multishot
1,628.0	5,350.0	MWD Survey (Wellbore #1)	MWD	MWD - Standard ISCWSA

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.24	338.02	100.0	0.2	-0.1	-0.2	0.24	0.24	0.00
200.0	0.31	333.47	200.0	0.6	-0.3	-0.6	0.07	0.07	-4.55
300.0	0.15	7.94	300.0	1.0	-0.4	-0.9	0.20	-0.16	34.47
400.0	0.30	14.44	400.0	1.4	-0.3	-1.0	0.15	0.15	6.50
500.0	0.45	27.64	500.0	2.0	0.0	-1.2	0.17	0.15	13.20
600.0	0.31	31.83	600.0	2.6	0.3	-1.3	0.14	-0.14	4.19
700.0	0.53	66.56	700.0	3.0	0.8	-1.0	0.33	0.22	34.73
800.0	0.65	44.49	800.0	3.6	1.7	-0.7	0.25	0.12	-22.07
900.0	0.31	82.88	900.0	4.0	2.3	-0.4	0.45	-0.34	38.39

Scientific Drilling International

Survey Report

Company:	CONOCOPHILLIPS	Local Co-ordinate Reference:	Well EVGBSAU 3315W-507
Project:	Lea County, NM (NAD27 NMF)	TVD Reference:	WELL @ 3966.0usft (Original Well Elev)
Site:	EAST VACUUM UNIT	MD Reference:	WELL @ 3966.0usft (Original Well Elev)
Well:	EVGBSAU 3315W-507	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	ACTUAL SURVEY	Database:	EDM 5000.1 Single User Db

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)
1,000.0	0.14	117.84	1,000.0	4.0	2.7	-0.1	0.21	-0.17	34.96
1,100.0	0.24	147.47	1,100.0	3.7	2.9	0.2	0.14	0.10	29.63
1,200.0	0.15	131.85	1,200.0	3.5	3.1	0.6	0.10	-0.09	-15.62
1,300.0	0.13	210.12	1,300.0	3.3	3.2	0.7	0.18	-0.02	78.27
1,400.0	0.03	177.40	1,400.0	3.2	3.1	0.7	0.11	-0.10	-32.63
1,458.0	0.37	196.12	1,458.0	3.0	3.1	0.8	0.59	0.59	32.12
1,628.0	0.24	214.27	1,628.0	2.2	2.7	1.0	0.09	-0.08	10.68
1,809.0	0.36	28.26	1,809.0	2.3	2.8	0.9	0.33	0.07	96.13
1,990.0	0.64	304.39	1,990.0	3.4	2.2	-0.2	0.39	0.15	-46.34
2,172.0	0.95	347.35	2,172.0	5.5	1.0	-2.3	0.36	0.17	23.60
2,353.0	0.71	347.74	2,352.9	8.0	0.5	-4.2	0.13	-0.13	0.22
2,535.0	0.60	337.88	2,534.9	10.0	-0.1	-5.9	0.09	-0.06	-5.42
2,716.0	0.41	45.42	2,715.9	11.3	0.0	-6.5	0.32	-0.10	37.31
2,898.0	0.66	79.60	2,897.9	12.0	1.5	-5.7	0.22	0.14	18.78
2,943.0	1.05	84.82	2,942.9	12.1	2.1	-5.2	0.88	0.87	11.60
2,988.0	1.54	91.40	2,987.9	12.1	3.2	-4.4	1.14	1.09	14.62
3,034.0	2.10	90.28	3,033.9	12.1	4.6	-3.2	1.22	1.22	-2.43
3,079.0	2.83	104.17	3,078.8	11.8	6.5	-1.5	2.08	1.62	30.87
3,124.0	3.85	117.09	3,123.8	10.8	8.9	1.1	2.80	2.27	28.71
3,170.0	5.24	124.99	3,169.6	8.9	12.0	4.7	3.31	3.02	17.17
3,215.0	5.92	127.87	3,214.4	6.3	15.6	9.1	1.63	1.51	6.40
3,260.0	7.07	126.98	3,259.1	3.2	19.6	14.2	2.57	2.56	-1.98
3,306.0	8.44	126.98	3,304.7	-0.5	24.6	20.4	2.98	2.98	0.00
3,351.0	9.98	130.13	3,349.1	-5.0	30.2	27.6	3.60	3.42	7.00
3,397.0	11.45	131.91	3,394.3	-10.6	36.6	36.1	3.28	3.20	3.87
3,442.0	12.71	131.42	3,438.3	-16.9	43.7	45.4	2.81	2.80	-1.09
3,487.0	14.41	130.14	3,482.0	-23.8	51.6	55.9	3.84	3.78	-2.84
3,533.0	15.62	127.87	3,526.5	-31.3	60.9	67.8	2.92	2.63	-4.93
3,578.0	16.12	126.30	3,569.8	-38.7	70.7	80.1	1.46	1.11	-3.49
3,623.0	16.53	126.90	3,612.9	-46.2	80.9	92.7	0.99	0.91	1.33
3,669.0	18.15	127.01	3,656.9	-54.5	91.8	106.4	3.52	3.52	0.24
3,714.0	19.73	125.73	3,699.4	-63.1	103.6	121.0	3.63	3.51	-2.84
3,759.0	20.71	125.35	3,741.6	-72.1	116.3	136.6	2.20	2.18	-0.84
3,805.0	21.51	125.91	3,784.6	-81.8	129.7	153.2	1.79	1.74	1.22
3,849.0	22.70	123.54	3,825.3	-91.2	143.3	169.7	3.38	2.70	-5.39
3,895.0	22.68	126.66	3,867.8	-101.4	157.8	187.5	2.62	-0.04	6.78
3,941.0	24.14	130.52	3,910.0	-112.8	172.1	205.7	4.60	3.17	8.39
3,985.0	25.95	130.21	3,949.8	-124.9	186.3	224.2	4.12	4.11	-0.70
4,031.0	26.02	129.82	3,991.2	-137.9	201.7	244.3	0.40	0.15	-0.85
4,076.0	26.39	127.94	4,031.6	-150.3	217.2	264.1	2.02	0.82	-4.18
4,121.0	27.43	127.05	4,071.7	-162.7	233.4	284.5	2.48	2.31	-1.98
4,167.0	27.89	126.12	4,112.4	-175.4	250.5	305.8	1.37	1.00	-2.02
4,212.0	28.35	126.60	4,152.1	-188.0	267.6	327.0	1.14	1.02	1.07

Scientific Drilling International

Survey Report

Company:	CONOCOPHILLIPS	Local Co-ordinate Reference:	Well EVGBSAU 3315W-507
Project:	Lea County, NM (NAD27 NME)	TVD Reference:	WELL @ 3966 0usft (Original Well Elev)
Site:	EAST VACUUM UNIT	MD Reference:	WELL @ 3966 0usft (Original Well Elev)
Well:	EVGBSAU 3315W-507	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	ACTUAL SURVEY	Database:	EDM 5000 1 Single User Db

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)
4,257.0	28 40	127.42	4,191 7	-200 9	284.7	348.4	0 87	0 11	1 82
4,303.0	28 46	127.29	4,232 2	-214.2	302.1	370.3	0 19	0.13	-0 28
4,348 0	28 44	127 31	4,271.7	-227 2	319 1	391.7	0.05	-0 04	0 04
4,393 0	28 47	127 31	4,311 3	-240 2	336.2	413 2	0 07	0 07	0 00
4,439 0	28 70	127.46	4,351.7	-253 5	353.7	435 1	0.52	0 50	0 33
4,484 0	28 94	126.86	4,391.1	-266 6	371 0	456 8	0 84	0.53	-1.33
4,529 0	28 07	125.67	4,430.7	-279.3	388 3	478 3	2.31	-1.93	-2.64
4,575 0	27 40	125 19	4,471.4	-291.7	405 7	499.7	1.54	-1 46	-1.04
4,620 0	27 54	124 95	4,511.3	-303.7	422.7	520.5	0.40	0 31	-0.53
4,666.0	28.01	125 22	4,552 0	-316.0	440.3	541.9	1.06	1.02	0 59
4,711 0	28.80	124.85	4,591 6	-328.3	457.8	563.3	1.80	1 76	-0.82
4,756 0	28 92	123.86	4,631.0	-340.5	475.7	585 0	1.09	0 27	-2 20
4,802 0	27 77	122 60	4,671.5	-352.5	494 0	606.8	2 82	-2 50	-2 74
4,847 0	27.93	122 87	4,711.3	-363 9	511 7	627 8	0.45	0.36	0 60
4,892 0	28.84	122.90	4,750 9	-375 5	529.6	649 2	2 02	2 02	0.07
4,938.0	29 89	122 86	4,790 9	-387 7	548 6	671.8	2 28	2 28	-0 09
4,983 0	30 46	123 07	4,829 8	-400 0	567 5	694 4	1 29	1 27	0.47
5,029 0	29.45	124.76	4,869 7	-412.9	586.6	717 3	2.86	-2.20	3.67
5,074 0	28 62	125 82	4,909 0	-425 5	604.4	739.2	2.17	-1.84	2 36
5,119 0	28 04	125.92	4,948.7	-438.0	621.7	760 5	1.29	-1.29	0.22
5,165 0	28 39	126 06	4,989.2	-450 8	639 3	782 3	0.77	0 76	0 30
5,211.0	26 67	129 62	5,030 0	-463 8	656.1	803 5	5.17	-3 74	7.74
5,255.0	25 30	130 31	5,069.5	-476.2	670.9	822 7	3 19	-3.11	1 57
5,303 0	25.55	130 28	5,112 9	-489.6	686.6	843.2	0 52	0 52	-0 06
5,350.0	25 55	130.28	5,155 3	-502.6	702 1	863.4	0.00	0.00	0 00

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
TARGET @ 4905'TVD	0.00	0 00	4,905 0	-420.6	597.6	652,369 00	768,803 00	32° 47' 25.433 N	103° 27' 31 103 W
- actual wellpath misses target center by 5 4usft at 5066 4usft MD (4902 4 TVD, -423 3 N, 601 5 E)									
- Circle (radius 50 0)									

Checked By: _____ Approved By: _____ Date: _____