

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED  
OMB NO. 1004-0135  
Expires: July 31, 2010

**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.*

5. Lease Serial No.  
NMNM106696

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

7. If Unit or CA/Agreement, Name and/or No.  
NMNM126140

1. Type of Well  
 Oil Well  Gas Well  Other

8. Well Name and No.  
SPEAK EASY FEDERAL UNIT 5H

2. Name of Operator  
OXY USA INCORPORATED

Contact: DAVID STEWART  
E-Mail: david\_stewart@oxy.com

9. API Well No.  
30-025-42267-00-X1

3a. Address  
HOUSTON, TX 77210-4294

3b. Phone No. (include area code)  
Ph: 432.685.5717  
Fx: 432.685.5742

10. Field and Pool, or Exploratory  
BOOTLEG RIDGE

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 1 T22S R32E Lot 4 660FNL 330FWL  
32.426208 N Lat, 103.637589 W Lon

11. County or Parish, and State  
LEA COUNTY, NM

HOBBSOCD  
DEC 23 2014  
RECEIVED

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A PD
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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 shall 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 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

OXY USA Inc. respectfully requests approval for the following changes to the drilling plan:

1. Extend the BHL approximately 150' past the west hardline to allow for our shoe track, see attached for amended C-102 plat and amended directional drilling plan.

Proposed TD - 13677'M 8556'V

2. Adjust production casing and cementing to amended TMD.  
Production Casing

5-1/2" 17# L-80 BT&C new csg @ 0-13677'M, 7-7/8" hole w/ 9.1# mud

*Original drilling ROA still applies*

APPROVED AS WRITTEN  
DEC 16 2014  
BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE  
KJ

14. I hereby certify that the foregoing is true and correct.  
Electronic Submission #278796 verified by the BLM Well Information System  
For OXY USA INCORPORATED, sent to the Hobbs  
Committed to AFMSS for processing by LINDA JIMENEZ on 11/20/2014 (15LJ0368SE)

Name (Printed/Typed) DAVID STEWART Title SR. REGULATORY ADVISOR

Signature (Electronic Submission) Date 11/12/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By EDWARD FERNANDEZ Title PETROLEUM ENGINEER Date 12/16/2014

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 Hobbs

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.

\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\*

DEC 24 2014

*mf*

## Additional data for EC transaction #278796 that would not fit on the form

### 32. Additional remarks, continued

Coll Rating (psi)-6285 Burst Rating (psi)-7740  
SF Coll-1.54 SF Burst-1.20 SF Ten-1.76

Production - Circulate cement w/ 600sx Tuned Light (TM) system cmt w/ 3#/sx Kol-Seal + .125#/sx Poly-E-Flake + .8% HR-601, 9.76ppg (10.2 downhole) 3.46 yield 788# 24hr CS 100% Excess followed by 820sx PP H cmt w/ 3#/sx salt + .3% CFR-3 + .5% Halad(R)-344 + 2#/sx Kol-Seal, 13.2ppg 1.65 yield 701# 24hr CS 40% Excess.

DV tool @ 4850'. If cement comes to surface during first stage cement job we will drop the cancelation cone for the DV tool. Add second stage contingency cement in the event we do not circulate cement to surface during the first stage.

Contingency 2nd Stage - Cement w/ 390sx HES light PPC + 3#/sx salt, 12.4ppg 2.05 yield 500# 26hr CS 10% Excess followed by 100sx PP cmt, 14.8ppg 1.33 yield 1849# 24hr CS 10# excess

Description of Cement Additives: Salt (Accelerator); CFR-3 (Dispersant); Kol-Seal, Poly-E-Flake (Lost Circulation Additive); Halad-344 (Low Fluid Loss Control); HR-601 (Retarder)

The above cement volumes could be revised pending the caliper measurement.

**OXY USA Inc.**  
**Speak Easy Federal Unit #5H**

**Casing Design Assumptions:**

**Burst Loads**

CSG Test (Production)

- Internal: Displacement fluid water + 80% CSG Burst rating
- External: Pore Pressure from the well TD to the Intermediate CSG shoe and MW of the drilling mud that was in the hole when the CSG was run to surface

Stimulation (Production)

- Internal: Displacement fluid + Max Frac treating pressure (not to exceed 80% CSG Burst rating)
- External: Pore Pressure from the well TD to the Intermediate CSG shoe and 8.5 ppg MWE to surface

**Collapse Loads**

Cementing (Surface/Intermediate/Production)

- Internal: Displacement Fluid
- External: Cement Slurries to TOC, MW to surface

Full Evacuation (Production)

- Internal: Atmospheric Pressure
- External: MW of the drilling mud that was in the hole when the CSG was run

**Tension Loads**

Running CSG (Surface/Intermediate/Production)

- Axial load of the buoyant weight of the string plus either 100 klb over-pull or string weight in air, whichever is less

Green Cement (Surface/Intermediate/Production)

- Axial load of the buoyant weight of the string plus the cement plug bump pressure (Final displacement pressure + 500 psi)

Burst, Collapse and Tensile SF are calculated using Landmark's Stress Check (Casing Design) software.

Division I  
1623 N. French Dr., Hobbs, NM 88240  
Phone: (575) 337-8161 Fax: (575) 337-8720  
Division II  
111 S. First St., Aramis, NM 88210  
Phone: (575) 746-1283 Fax: (575) 746-9720  
Division III  
1000 Rio Grande Blvd., Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
Division IV  
1229 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3462 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

API Number 30-025-	Pool Code 6925	Pool Name Bootleg Ridge Delaware, NW
Property Code 39664	Property Name Speak Easy <del>SPEAKEASY</del> FEDERAL UNIT	Well Number 5H
OGRID No. 16694	Operator Name OXY USA INC.	Elevation 3661.8'

**Surface Location**

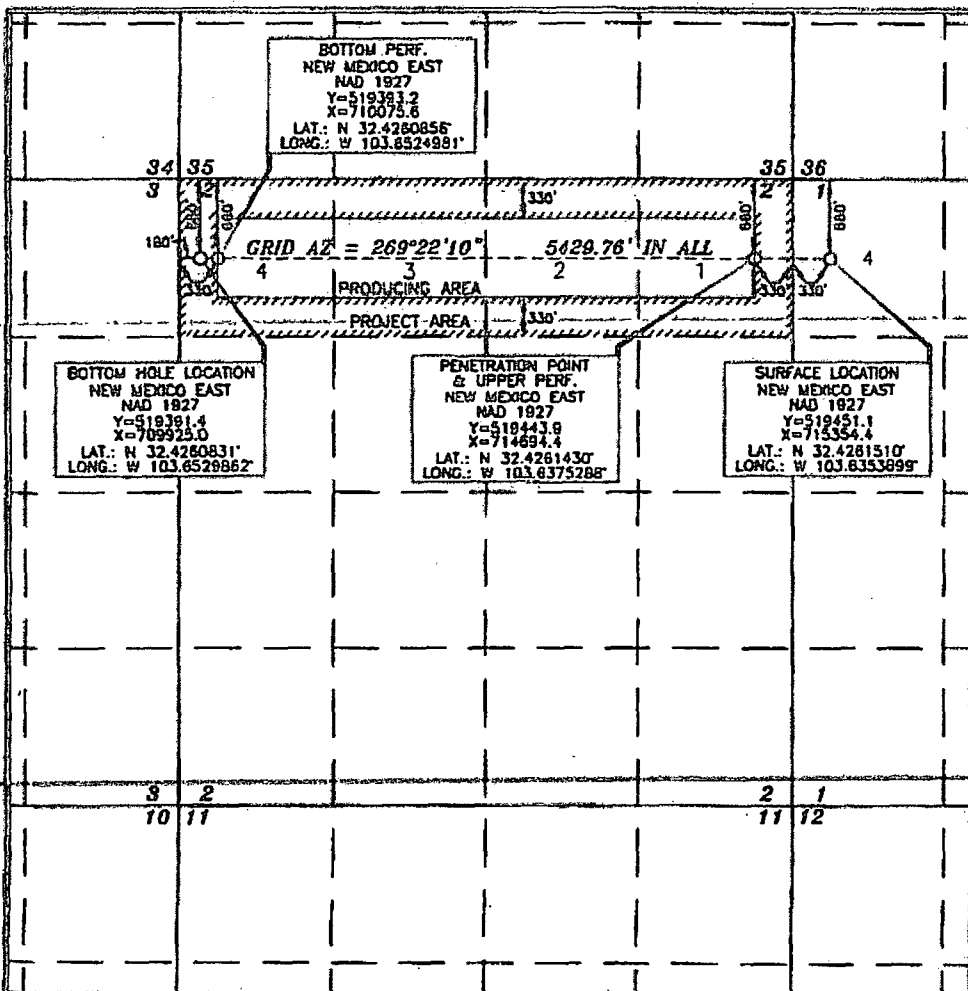
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	1	22 SOUTH	32 EAST, N.M.P.M.		660'	NORTH	330'	WEST	LEA

**Bottom Hole Location If Different From Surface**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	2	22 SOUTH	32 EAST, N.M.P.M.		660'	NORTH	180'	WEST	LEA

Dedicated Acres 160	Joint or Infill N	Consolidation Code	Order No.
------------------------	----------------------	--------------------	-----------

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



**OPERATOR CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or retained mineral interest in the land including the proposed bottom hole location or has a right to drill this well in this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order exception provided by the Division.

*David Stewart Sr. Reg. Adv.*  
Signature Date

David Stewart Sr. Reg. Adv.  
Printed Name

dwid\_stewart@oxy.com  
E-mail Address

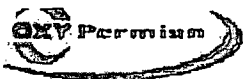
**SURVEYOR CERTIFICATION**

I hereby certify that the well location shown on this plat was plotted from the results of a survey made by me or under my supervision, and that the same is true and correct to the best of my belief.

JERRY J. ASH  
PROFESSIONAL LAND SURVEYOR  
15079  
JANUARY 31, 2014  
Date of Survey

*Jerry J. Ash*  
Signature and Seal of Professional Surveyor

*Jerry J. Ash*  
Certificate Number 15079



SFU-5H  
 Lea County, New Mexico  
 Northing: 519451.00  
 Easting: 715354.00  
 Design #3



Azimuth to Grid North  
 True North: -0.37°  
 Magnetic North: 0.93°

Magnetic Field  
 Strength: 48466.4snT  
 Dip Angle: 60.30°  
 Date: 01/30/2014  
 Model: IGRF2010

B @ 3585.80usft  
 Gr @ 3661.80

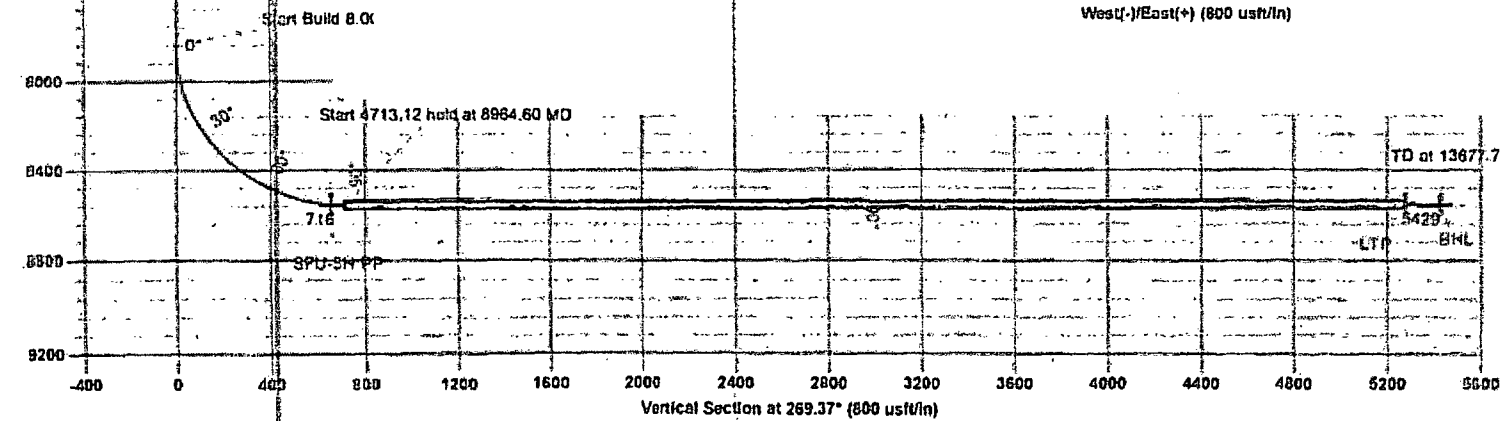
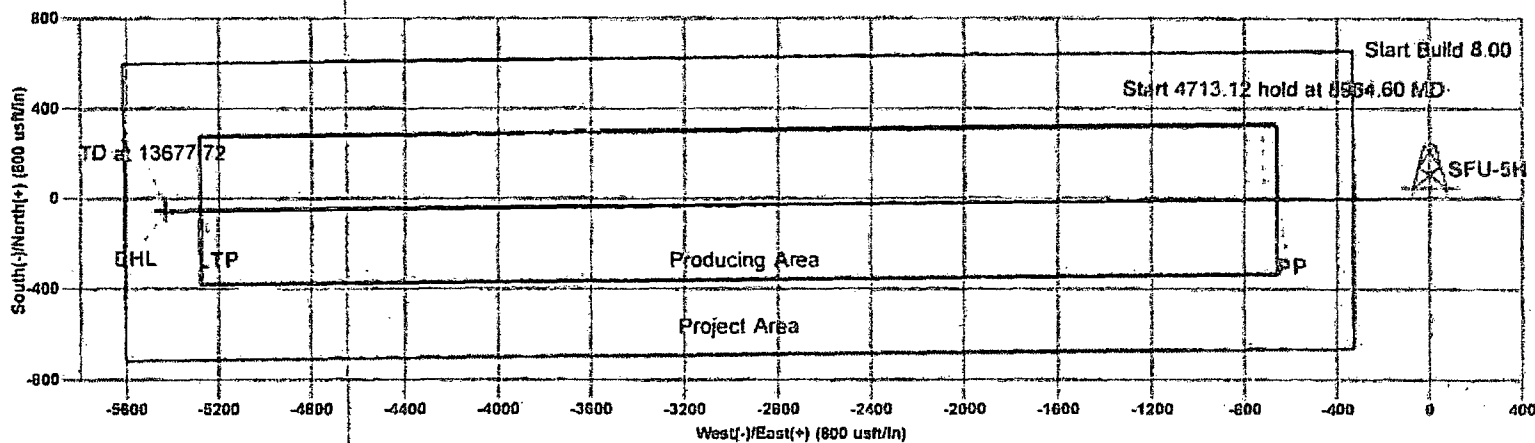
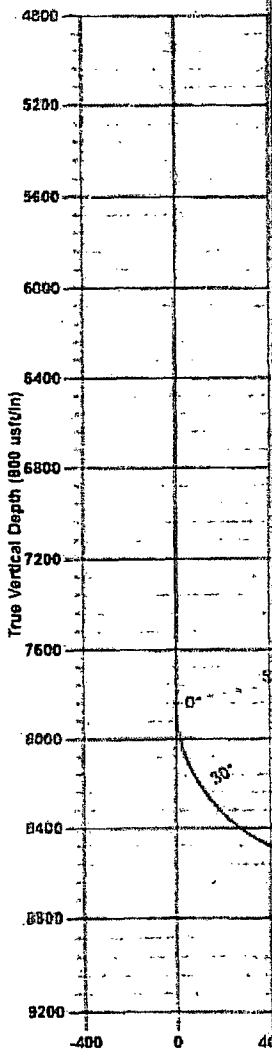
WELL DETAILS		SFU-5H	
+N/-S	+E/-W	Ground Level	3661.80
0.00	0.00	Easting	715354.00
Northing	519451.00	Latitude	32.426
		Longitude	-103.635

DESIGN TARGET DETAILS					
Name	TVD	+N/-S	+E/-W	Northing	Easting
SFU-5H PP	8553.60	-6.80	-058.82	519444.20	714695.18
SFU-5H BHL	8555.80	-59.65	-5428.99	519391.35	709925.01
SFU-5H LTP	8555.80	-58.00	-5279.00	519393.00	710075.00

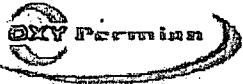
SECTION DETAILS										
MD	Inc	Azi	TVD	+N/-S	+E/-W	Diag	TFace	VSect	Target	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
7839.60	0.00	0.00	7839.60	0.00	0.00	0.00	0.00	0.00		
8964.60	90.00	269.37	8555.80	-7.87	-718.15	8.00	269.37	718.20		
13677.72	90.00	269.37	8555.80	-59.65	-5428.99	0.00	0.00	5429.32	SFU-5H BHL	

**SITE DETAILS:**  
 Speakeasy Federal Unit 5H  
 Site Centre Northing: 519451.00  
 Easting: 715354.00  
 Positional Uncertainty: 0.00  
 Convergence: 0.37  
 Local North: Grid

**PROJECT DETAILS:**  
 Lea County, New Mexico  
 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



Jody Barclay  
 9:36, April 01 2014  
 Scientific Drilling  
 2740 N. Highway 287  
 Decatur, TX 76234



Scientific Drilling  
Planning Report



Database:	CompassC	Local Co-ordinate Reference:	Well SFU-5H
Company:	OXY	TVD Reference:	KB @ 3685.80usft
Project:	Lea County, New Mexico	MD Reference:	KB @ 3685.80usft
Site:	Speakeasy Federal Unit 5H	North Reference:	Grid
Well:	SFU-5H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	Design #3		

Project:	Lea County, New Mexico		
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:	Speakeasy Federal Unit 5H				
Site Position:	Map	Northing:	519,451.00 usft	Latitude:	32.426
From:		Easting:	715,354.00 usft	Longitude:	-103.635
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.37 *

Well:	SFU-5H					
Well Position	+N-S	0.00 usft	Northing:	519,451.00 usft	Latitude:	32.426
	+E-W	0.00 usft	Easting:	715,354.00 usft	Longitude:	-103.635
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,661.80 usft

Wellbore:	Original Wellbore				
-----------	-------------------	--	--	--	--

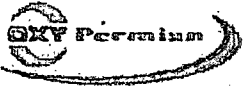
Magnetic	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	01/30/14	7.31	60.30	48,466

Design:	Design #3				
---------	-----------	--	--	--	--

Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00	

Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)
	0.00	0.00	0.00	269.37

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)	TFD: (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7,839.60	0.00	0.00	7,839.60	0.00	0.00	0.00	0.00	0.00	0.00	
8,964.60	90.00	269.37	8,555.80	-7.87	-716.15	8.00	8.00	0.00	269.37	
13,677.72	90.00	269.37	8,555.80	-59.65	-5,428.99	0.00	0.00	0.00	0.00	SFU-5H BHL



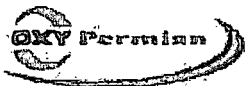
# Scientific Drilling Planning Report



<b>Database:</b>	CompassC	<b>Local Co-ordinate Reference:</b>	Well SFU-5H
<b>Company:</b>	OXY	<b>TVD Reference:</b>	KB @ 3585.80usft
<b>Project:</b>	Lea County, New Mexico	<b>MD Reference:</b>	KB @ 3585.80usft
<b>Site:</b>	Speakeasy Federal Unit 5H	<b>North Reference:</b>	Grid
<b>Well:</b>	SFU-5H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Original Wellbore		
<b>Design:</b>	Design #3		

**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
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00



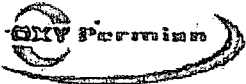
Scientific Drilling  
Planning Report



Database:	CompassC	Local Co-ordinate Reference:	Well SFU-5H
Company:	OXY	TVD Reference:	KB @ 3685.80usft
Project:	Lea County, New Mexico	MD Reference:	KB @ 3685.80usft
Site:	Speakeasy Federal Unit 5H	North Reference:	Grid
Well:	SFU-5H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	Design #3		

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)
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,839.60	0.00	0.00	7,839.60	0.00	0.00	0.00	0.00	0.00	0.00
7,850.00	0.83	269.37	7,850.00	0.00	-0.08	0.08	8.00	8.00	0.00
7,900.00	4.83	269.37	7,899.93	-0.03	-2.55	2.55	8.00	8.00	0.00
7,950.00	8.83	269.37	7,949.56	-0.09	-8.49	8.49	8.00	8.00	0.00
8,000.00	12.83	269.37	7,998.66	-0.20	-17.89	17.89	8.00	8.00	0.00
8,050.00	16.83	269.37	8,046.99	-0.34	-30.68	30.68	8.00	8.00	0.00
8,100.00	20.83	269.37	8,094.30	-0.51	-46.82	46.82	8.00	8.00	0.00
8,150.00	24.83	269.37	8,140.37	-0.73	-66.22	66.22	8.00	8.00	0.00
8,200.00	28.83	269.37	8,184.98	-0.98	-88.77	88.78	8.00	8.00	0.00
8,250.00	32.83	269.37	8,227.91	-1.26	-114.39	114.40	8.00	8.00	0.00
8,300.00	36.83	269.37	8,268.94	-1.57	-142.95	142.95	8.00	8.00	0.00
8,350.00	40.83	269.37	8,307.88	-1.91	-174.29	174.30	8.00	8.00	0.00
8,400.00	44.83	269.37	8,344.54	-2.29	-208.27	208.28	8.00	8.00	0.00
8,450.00	48.83	269.37	8,378.74	-2.69	-244.73	244.74	8.00	8.00	0.00
8,500.00	52.83	269.37	8,410.32	-3.11	-283.48	283.50	8.00	8.00	0.00
8,550.00	56.83	269.37	8,439.11	-3.56	-324.35	324.37	8.00	8.00	0.00
8,600.00	60.83	269.37	8,464.98	-4.03	-367.12	367.14	8.00	8.00	0.00
8,650.00	64.83	269.37	8,487.81	-4.52	-411.59	411.61	8.00	8.00	0.00
8,700.00	68.83	269.37	8,507.47	-5.03	-457.55	457.57	8.00	8.00	0.00
8,750.00	72.83	269.37	8,523.89	-5.55	-504.76	504.79	8.00	8.00	0.00
8,800.00	76.83	269.37	8,536.97	-6.08	-553.01	553.04	8.00	8.00	0.00
8,850.00	80.83	269.37	8,546.65	-6.61	-602.05	602.08	8.00	8.00	0.00
8,900.00	84.83	269.37	8,552.89	-7.16	-651.64	651.68	8.00	8.00	0.00
8,950.00	88.83	269.37	8,555.65	-7.71	-701.55	701.60	8.00	8.00	0.00
8,964.60	90.00	269.37	8,555.80	-7.87	-716.15	716.20	8.00	8.00	0.00
9,000.00	90.00	269.37	8,555.80	-8.26	-751.55	751.59	0.00	0.00	0.00
9,100.00	90.00	269.37	8,555.80	-9.36	-851.54	851.59	0.00	0.00	0.00
9,200.00	90.00	269.37	8,555.80	-10.45	-951.54	951.59	0.00	0.00	0.00
9,300.00	90.00	269.37	8,555.80	-11.55	-1,051.53	1,051.59	0.00	0.00	0.00



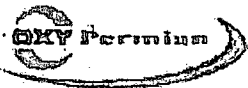


Scientific Drilling  
Planning Report



Database:	CompassC	Local Co-ordinate Reference:	Well SFU-5H
Company:	OXY	TVD Reference:	KB @ 3685.80usft
Project:	Lea County, New Mexico	MD Reference:	KB @ 3685.80usft
Site:	Speakeasy Federal Unit 5H	North Reference:	Grid
Well:	SFU-5H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	Design #3		

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)
9,400.00	90.00	269.37	8,555.80	-12.65	-1,151.53	1,151.59	0.00	0.00	0.00
9,500.00	90.00	269.37	8,555.80	-13.75	-1,251.52	1,251.59	0.00	0.00	0.00
9,600.00	90.00	269.37	8,555.80	-14.85	-1,351.51	1,351.59	0.00	0.00	0.00
9,700.00	90.00	269.37	8,555.80	-15.95	-1,451.51	1,451.59	0.00	0.00	0.00
9,800.00	90.00	269.37	8,555.80	-17.05	-1,551.50	1,551.59	0.00	0.00	0.00
9,900.00	90.00	269.37	8,555.80	-18.15	-1,651.49	1,651.59	0.00	0.00	0.00
10,000.00	90.00	269.37	8,555.80	-19.24	-1,751.49	1,751.59	0.00	0.00	0.00
10,100.00	90.00	269.37	8,555.80	-20.34	-1,851.48	1,851.59	0.00	0.00	0.00
10,200.00	90.00	269.37	8,555.80	-21.44	-1,951.48	1,951.59	0.00	0.00	0.00
10,300.00	90.00	269.37	8,555.80	-22.54	-2,051.47	2,051.59	0.00	0.00	0.00
10,400.00	90.00	269.37	8,555.80	-23.64	-2,151.46	2,151.59	0.00	0.00	0.00
10,500.00	90.00	269.37	8,555.80	-24.74	-2,251.46	2,251.59	0.00	0.00	0.00
10,600.00	90.00	269.37	8,555.80	-25.84	-2,351.45	2,351.59	0.00	0.00	0.00
10,700.00	90.00	269.37	8,555.80	-26.93	-2,451.45	2,451.59	0.00	0.00	0.00
10,800.00	90.00	269.37	8,555.80	-28.03	-2,551.44	2,551.59	0.00	0.00	0.00
10,900.00	90.00	269.37	8,555.80	-29.13	-2,651.43	2,651.59	0.00	0.00	0.00
11,000.00	90.00	269.37	8,555.80	-30.23	-2,751.43	2,751.59	0.00	0.00	0.00
11,100.00	90.00	269.37	8,555.80	-31.33	-2,851.42	2,851.59	0.00	0.00	0.00
11,200.00	90.00	269.37	8,555.80	-32.43	-2,951.42	2,951.59	0.00	0.00	0.00
11,300.00	90.00	269.37	8,555.80	-33.53	-3,051.41	3,051.59	0.00	0.00	0.00
11,400.00	90.00	269.37	8,555.80	-34.63	-3,151.40	3,151.59	0.00	0.00	0.00
11,500.00	90.00	269.37	8,555.80	-35.72	-3,251.40	3,251.59	0.00	0.00	0.00
11,600.00	90.00	269.37	8,555.80	-36.82	-3,351.39	3,351.59	0.00	0.00	0.00
11,700.00	90.00	269.37	8,555.80	-37.92	-3,451.39	3,451.59	0.00	0.00	0.00
11,800.00	90.00	269.37	8,555.80	-39.02	-3,551.38	3,551.59	0.00	0.00	0.00
11,900.00	90.00	269.37	8,555.80	-40.12	-3,651.37	3,651.59	0.00	0.00	0.00
12,000.00	90.00	269.37	8,555.80	-41.22	-3,751.37	3,751.59	0.00	0.00	0.00
12,100.00	90.00	269.37	8,555.80	-42.32	-3,851.36	3,851.59	0.00	0.00	0.00
12,200.00	90.00	269.37	8,555.80	-43.41	-3,951.36	3,951.59	0.00	0.00	0.00
12,300.00	90.00	269.37	8,555.80	-44.51	-4,051.35	4,051.59	0.00	0.00	0.00
12,400.00	90.00	269.37	8,555.80	-45.61	-4,151.34	4,151.59	0.00	0.00	0.00
12,500.00	90.00	269.37	8,555.80	-46.71	-4,251.34	4,251.59	0.00	0.00	0.00
12,600.00	90.00	269.37	8,555.80	-47.81	-4,351.33	4,351.59	0.00	0.00	0.00
12,700.00	90.00	269.37	8,555.80	-48.91	-4,451.33	4,451.59	0.00	0.00	0.00
12,800.00	90.00	269.37	8,555.80	-50.01	-4,551.32	4,551.59	0.00	0.00	0.00
12,900.00	90.00	269.37	8,555.80	-51.11	-4,651.31	4,651.59	0.00	0.00	0.00
13,000.00	90.00	269.37	8,555.80	-52.20	-4,751.31	4,751.59	0.00	0.00	0.00
13,100.00	90.00	269.37	8,555.80	-53.30	-4,851.30	4,851.59	0.00	0.00	0.00
13,200.00	90.00	269.37	8,555.80	-54.40	-4,951.30	4,951.59	0.00	0.00	0.00
13,300.00	90.00	269.37	8,555.80	-55.50	-5,051.29	5,051.59	0.00	0.00	0.00
13,400.00	90.00	269.37	8,555.80	-56.60	-5,151.28	5,151.59	0.00	0.00	0.00
13,500.00	90.00	269.37	8,555.80	-57.70	-5,251.28	5,251.59	0.00	0.00	0.00
13,600.00	90.00	269.37	8,555.80	-58.80	-5,351.27	5,351.59	0.00	0.00	0.00
13,677.72	90.00	269.37	8,555.80	-59.65	-5,428.99	5,429.32	0.00	0.00	0.00



Scientific Drilling  
Planning Report



Database:	CompassC	Local Co-ordinate Reference:	Well SFU-5H
Company:	OXY	TVD Reference:	KB @ 3685.80usft
Project:	Lea County, New Mexico	MD Reference:	KB @ 3685.80usft
Site:	Speakeasy Federal Unit 5H	North Reference:	Grid
Well:	SFU-5H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellbore		
Design:	Design #3		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude
- hits target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
SFU-5H PP	0.00	0.00	8,553.60	-6.80	-658.82	519,444.20	714,695.18	32.426	-103.638
- plan misses target center by 0.45usft at 8907.20usft MD (8553.50 TVD, -7.24 N, -658.82 E)									
- Point									
SFU-5H BHL	0.00	0.00	8,555.80	-59.65	-5,428.99	519,391.35	709,925.01	32.426	-103.653
- plan hits target center									
- Point									
SFU-5H LTP	0.00	0.00	8,555.60	-58.00	-5,279.00	519,393.00	710,075.00	32.426	-103.652
- plan hits target center									
- Rectangle (sides W@ 00 H@ 4,563 12 D@ 30.00)									