Form 3160-3 (March 2012)

SECRETARY'SPECIVED

JAOCB Atellas

UNITED STATES DEPARTMENT OF THE INTERIO NMOCD ARTESIA BUREAU OF LAND MANAGEME

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

5.	Lease Serial No.	
NM	NM 82896	76

If Indian, Allotee or Tribe Name

APPLICATION FOR PERMIT TO DRILL OR REENTER

la. Type of work: DRILL	REENTER			7. If Unit or CA Agre	ement, Name and	No.
10. 1) pe of tres.	Other	Single Zone Multip	le Zone	8. Lease Name and NIMITZ 12 FEDER		655
2. Name of Operator OXY USA INC		<16/6/6 7	>	9. API Well No.	41011	
3a. Address P.O. BOX 4294 HOUSTON, TX 77210		e No. (include area code) 3-6640		10. Field and Pool, or POKER LAKE; DE		604
4. Location of Well (Report location clearly and in accordance At surface 330' FNL & 2010' FEL At proposed prod. zone 330' FSL & 2010' FEL	lance with arry State req	uirements.*)		11. Sec., T. R. M. or B B, SEC 12, T24S,	-	Area
 Distance in miles and direction from nearest town or pos Miles SouthEast of Carlsbad, NM 	st office*			12. County or Parish EDDY COUNTY, N	13. Sta	ate
15. Distance from proposed* 330' location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. 880	of acres in lease	17. Spacing	g Unit dedicated to this	well	
18. Distance from proposed location* 4300' to nearest well, drilling, completed, applied for, on this lease, ft.		posed Depth ' MD / 7944' TVD	20. BLM/E NMB000			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3489.5'	22. App 01/01/	roximate date work will star 2013	t*	23. Estimated duration 34 DAYS	n	
		Attachments	•		:	
The following, completed in accordance with the requirement	its of Onshore Oil and	Gas Order No.1, must be at	tached to thi	s form:		_
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National For SUPO must be filed with the appropriate Forest Service 		Item 20 above). e 5. Operator certific	ation	ns unless covered by an	·	·
25. Signiture White We was a second		ame <i>(Printed/Typed)</i> ENNIFER DUARTE (jer	nnifer_dua	irte@oxy.com)	Date 08/23/2012	
Title REGULATORY ANALYST						
Approved by (Signature)	N	ame (Printed/Typed)	-	•	DateJAN 3 -	2013
Title STATE DIRECTUS	0	ffice	TAR COTT		1	

AM STATE OFFICE

Application approval 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. APPROVAL FOR TWO YEARS

Conditions of approval, if any, are attached.

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.

(Continued on page 2)

*(Instructions on page 2)

District 1
1825 N. French Dr., Hobbs, NM 88240
Phone: (375) 393-6161 Fax: (575) 393-0720
District III.
511 S. First St., Artesia, NM 88210
Phone: (375) 748-1283 Fax: (575) 748-9720
District III.
1000 Rio Brauros Road, Azrec, NM 87410
Phone: (305) 334-6178 Fax: (505) 334-6170
District IV.
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (305) 476-3460 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

Surface Location Corito No. Corito No. Corito No. Surface Location
OCHONG OXY USA INC. Surface Location UL or for no Section B 12 24 SOUTH 30 EAST, N.M.P.M. Bottom Hole Location If Different From Surface UL or for no Section Township Range Lot fidin Feet from the North-South line Feet from the East-West line County Bottom Hole Location If Different From Surface UL or for no Section Township O 12 24 SOUTH 30 EAST, N.M.P.M. Dedicated Acres Joint or Infill Consolidation Code Order No. Dedicated Acres Joint or Infill Consolidation Code Order No. SURFACE LOCATION SURFACE LOCATION SURFACE LOCATION SURFACE LOCATION SURFACE LOCATION NEW MEXICO FAST Y= 253705.2 SURFACE LOCATION SURFACE LOCATION SURFACE LOCATION NEW MEXICO FAST Y= 253705.2 SURFACE LOCATION SURFACE LOCATIO
Surface Location Section Township Range Lot Idn Feet from the Poet from the East/West line County
UL or lot ao. Section B 12 24 SOUTH 30 EAST, N.M.P.M. Bottom Hole Location If Different From Surface UL or lot ao. Section Township B Range Lot Idn Feet from the North/South line Feet from the South line Feet from the South line Feet from the South line South Idn Feet from the South line Feet from the Sout
B 12 24 SOUTH 30 EAST, N.M.P.M. 330' NORTH 2010' EAST EDDY Bottom Hole Location If Different From Surface UL or lot ao. Section Township Range 0 12 24 SOUTH 30 EAST, N.M.P.M. 10 In Feet from the SOUTH 2010' EAST EDDY Dedicated Acres Joint or Infill 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. SURFACE LOCATION NEW MEXICO EAST NO 1927 Lacidottion 1927 Lac
Bottom Hole Location If Different From Surface UL or lot no. Section Township Range Lot lan Feet from the North/South line Feet from the SOUTH SOUTH SOUTH LINE Feet from the SOUTH SOUTH LINE FEET SOUTH LIN
UL or lot no. Section Township Range Assert N. M. P. M. South Intelligence of the South Intelligen
Dedicated Acres Joint or Infill Consolidation Code Order No. 2224
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. Y=65178.8 X=65178.8 OPERATOR CERTIFICATION SURFACE LOCATION New MENICO (AST) Y=450862.1 X=655109.2 LAT: N 32,2365412 LONG: W 103.8316722 LAT: N 32,2365412 LONG: W 103.8316722 LAT: N 32,2365412 LONG: W 103.8316722 SURFACE LOCATION 1 thereby verify that the information contained herein is one and very miles of the stant of my knowledge and belief, and that this very miles of the hear of my knowledge and belief, and that this very an about information in the remaining interest in the land inclining the proposed bottom kief herein in very miles of part of the stant of the part of the par
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. Y=81147.0 Y=8
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. Y=45176.9 X=651780.8 SURFACE LOCATION NEW MEXICO EAST NAD 1927 Y=450865.2 LAT. N. 32223861.7 LONG: W. 102.8316722 LONG: W. 102.8316722 SURVEYOR CERTIFICATION 1 heredy-crift the heat of my beautiful entered bettern the formation or watering interest or walenared interest water and water and an unase of sack as mineral or watering interest or walenared interest water and water a
SURFACE LOCATION NEW MEXICO (AST) NEW ME
SURFACE LOCATION NEW MEXICO EAST NAD 1927 Y = \$50862.1 X-6551092 LAT: N 32.2385417 LONG: W 103.8316722 LONG: W 103.8316722 OPERATOR CERTIFICATION I hereby certify that the information contained herein is one and complete to the heart of my homolecity and that this vertical in the land invitaling the proposed bostom kele function or has a single to detail this well as this location purmases to a contained with the well as the information of the land invitaling the proposed bostom kele function or has a single to detail this well as this location purmases to a contained with the land invitaling the proposed bostom kele function or has a single to detail this well as this location purmases to a contained with the land invitaling the proposed bostom kele function or has a single to detail this well as this location purmases to a contained with the land invitaling the proposed bostom kele function or has a single to detail this well as the land invitaling the proposed bostom kele function or has a single to detail this well as the land invitaling the proposed bostom kele function or has a single to the land invitaling the proposed bostom kele function or has a single to the land invitaling the proposed bostom kele function or has a single to the land invitaling the proposed bostom kele function or has a single to the land invitaling the proposed bostom kele function or has a single to the land invitaling the proposed bostom kele function or has a single to the land invitaling the proposed bostom kele function of the land invitaling the proposed bostom kele function of the land invitality of the land in
SURFACE LOCATION NEW MEXICO EAST NAO 1927 Y=658662 X=658663 X=12,2385412 LONG: W 103.8316722 LAI: N 322.2385412 LONG: W 103.8316722 LONG: W 103.831672 LONG: W 103.831672 LONG: W 103.831672 LONG: W 103.831672 LONG:
NEW MEXICO EAST NAD 1927 Y=450862.1 X=555102.2 LAT: N 32.2385412 LONG: W 103.8316722 LONG: W 103.831672 LONG: W
Y=450862.1 X=655169.2 LAT: N 32.238541Z LONG: W 103.831672Z LAT: N 32.238541Z LONG: W 103.831672Z LONG: W 103.83167Z LONG: W 103.83167Z LONG: W 103.83167Z LONG: W 103.8316Z LONG:
Interest in the land instituting the proposed bottom kere location or incertal to the land instituting the proposed bottom kere location or incertal to a contract with an owner of such a mineral or weeking interest, or to a computatory pooling order helpingine ended by the division helpingine ended by the division helpingine ended by the division of the financial value of the printed Name. 18.1889 18.1899 18.18
has a right to deall this well as this location pursuant to a contract with an owner of such a mineral or working interest, or to a subminary produce agreement or a compulsory pooling order height of the division Service Dance Printed Name Anail Address SURVEYOR CERTIFICATION
nith un owner of such a mineral or working interest, or to a compulsory pooling order working agreement or a compulsory pooling order had roughed by the division had such that the same of such a compulsory pooling order had roughed by the division had such that the same of such a compulsory pooling order had roughed by the division had such that the same of such a compulsory pooling order had roughed by the division had such as the same of such a compulsory pooling order had roughed by the division had such as the same of such as the same o
voluntary prolong agreement or a computary proling order heightfore entired by the division Mandelland 8/1/12 Frankle Dracke Printed Mane Lennike Dracke Printed Mane Lennike Dracke Surveyor Certification
1000 1000 1000 1000 1000 1000 1000 100
Surveyor certification
I hereby certify thought shell be direct shown on this
plat was plated in the plate of
made by me of angle of super soll state and that the same is the angle of ect to the best of my beker.
made by me of angle of Mile Aspect and that the same is the angle of each of the same is the angle of each of the same is the angle of the same is the same is the angle of the same is the same is the angle of the same is the same
Signature and Si
Date of Sural Signature and Sural LAND Signature and Sural LAND Signature and Sural LAND
I DOUTONG DOTE LOGARDING NOT NOT 1 No. 20
NEW MEXICO EAST NAD 1927 446274.4 x=655128.1
1 x=655128.1 2 2559300 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
X=655128.1 LAT.: N 32.2259300' LONG:: W 103.8316804' 2010' Certificate Number 15079

Y=445947.2 X=655805.9

Y=445941.8 X=654472.3

OPERATOR CERTIFICATION

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements. Executed this day of face statements.

Name:	Peter Lawrence	Vea
Position: _	Reservoir Management	Team Leader
		110, Houston, TX 77046
Telephone	e:713-215-7644	
		nce@oxy.com
		natory):Dusty Weaver
		O. Box 50250 Midland, TX 79710
		432-685-5723
		calvin_weaver@oxy.com

OXY USA Inc

Nimitz 12 Federal 3H APD Data

OPERATOR NAME / NUMBER: OXY USA Inc

16696

LEASE NAME / NUMBER: Nimitz 12 Federal 3H

Federal Lease No:

STATE: NM

COUNTY: Eddy

SURFACE LOCATION:

330' FNL & 2010' FEL, Sec 12, T24S, R30E

BOTTOM HOLE LOCATION:

330' FSL & 2010' FEL, Sec. 12, T24S, R30E

C-102 PLAT APPROX GR ELEV: <u>3489.5'</u> EST KB ELEV: <u>3513.5' (24' KB)</u>

1. GEOLOGIC NAME OF SURFACE FORMATION

a. Permian

2. ESTIMATED TOPS OF GEOLOGICAL MARKERS & DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS

Formation Tops	TV Depth Top	Expected Fluids
T. Rustler	520	
T. Salado	940	-
T. Lamar	4250	-
Bell Canyon	4300	-
Cherry Canyon	5150	-
Brushy Canyon	6450	Oil
T. Brushy Canyon A2	7919	Oil
Target TD (TVD)	7944	Oil
B. Brushy Canyon A2	7984	Oil

A. Fresh water has been found above the Rustler. The deepest water zone in the area has been found at 400' per New Mexico State Engineer map.

GREATEST PROJECTED TD 12224' MD/ 7944' TVD OBJECTIVE: Brushy Canyon A2

3. CASING PROGRAM (All Casing is in NEW CONDITION)

Surface Casing: 13.375" casing set at ± 545'MD/ 545'TVD in a 17.5" hole filled with 8.60 ppg mud

Interval	Length	Wt	Gr	Cplg	Coll Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	, ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'- 545°	545	48	H-40	ST&C	770	1730	322	12.715	12.559	3.02	6.16	2.64

Intermediate Casing: 9.625" casing set at ± 4350'MD / 4350'TVD in a 12.25" hole filled with 10.2 ppg mud

 iterinoatate	Cusing.	.023 Cu	sing set	ut ± 1550	/ MID / T.	750 1 410 1	11 a 12.23	HOIC THIN	cu with i	o.z pps	muu	
					Coll	Burst						
Interval	Length	Wt	Gr	Cplg	Rating	Rating	Jt Str	ID	Drift	SF	SF	SF
-	4/25				(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst	Ten
0'- 4350 '	4350	40	J-55	LT&C	2570	3950	520	8.835	8.75	1.52	1.28	3.49

Production Casing: 5.5" casing set at ± 12224'MD / 7944'TVD in a 8.75" hole filled with 9.40 ppg mud

					Coll	Burst						
1					Rating	Rating	Jt Str	ID	Drift	SF	SF	SF
Interval	Length	Wt	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)	(in)	Coll	Burst	Ten
0'- 12204'	12224	17	L-80	BT&C	6290	7740	397	4.892	4.767	1.62	2.51	3.43

Collapse and burst loads calculated using Stress Check with actual anticipated loads.

See COA

See

4. **CEMENT PROGRAM:**

Su	rfac	e In	terva	ı
\mathcal{S}_{u}	ulat		tti va	

Interval	Amount sx	Ft of Fill	Туре	Gal/Sk	PPG	Ft ³ /sk	24 Hr Comp
Surface (TOC:	0' - 545')						
Lead: 0'-214' (165% Excess)	200	214	Premium Plus Cement: 94 lbm/sk Premium Plus Cement (Cement), 4% Bentonite (Light Weight Additive), 1% Calcium Chlorid – Flake (Accelerator), 0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive)	9.14	13.50	1.73	1006 psi
Tail: 214' 545' (165% Excess)	480	331	Premium Plus Cement: 94 lbm/sk Premium Plus Cement (Cement), 2% Calcium Chlorid – Flake (Accelerator)	6.39	14.80	1.35	1346 psi

Intermediate Interval

Interval	Amount sx	Ft of Fill	Туре	Gal/Sk	PPG	Ft ³ /sk	24 Hr Comp
Intermediate (1	OC: 0' - 4	350')					
Lead: 0' - 3518' (105% Excess)	1120	3518	Light Premium Plus Cement: 5% Salt (Salt), 5 lbm/sk Kol Seal (Light Weight Additive), 0.125 lb/sk Poly-E- Flake (Lost Circulation Additive), 0.35% HR-800 (Retarder)	9.88	12.90	1.91	734 psi
Tail: 3518' – 4350' (105% Excess)	410	832	Premium Plus Cement: 94 lbm/sk Premium Plus Cement (Cement), 3 lbm/sk Kol-Seal (Lost Circulation Additive), 0.5% WellLife 734 (Cement Enhancer)	6.19	14.80	1.35	1 8 49 psi

Production Interval

Interval	Amount sx	Ft of Fill	Туре	Gal/Sk	PPG	Ft ³ /sk	24 Hr Comp
Production (TO	OC: 0' - 122	224')					
St 3 - Lead: 0' - 4016' (10% Excess)	570	4016	Halliburton Light Premium Plus: 3 lbm/sk Salt (Salt)	11.39	12.40	2.05	299 psi
St 3 - Tail: 4016' - 4400' (200% Excess)	100	384	Premium Plus Cement: 94 lbm/sk Premium Cement (Cement), 2 % Calcium Chloride - Flake (Accelerator)	6.36	14.80	1.34	1745 psi
			POST TOOL SET AT 4400'	l	<u> </u>	L	* ****
St 2 - Lead: 4400' - 6766' (125% Excess)	630	2366	Halliburton Light Premium Plus: 5 lbm/sk Salt (Salt), 5 lbm/sk Kol-Seal (Lost Circulation Additive), 0.3 % HR- 601 (Retarder), 0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive)	11.78	12.40	2.16	709
St 2 - Tail: 6766' – 7000' (125% Excess)	100	234	Premium Cement: 94 lbm/sk Premium Cement (Cement), 0.15% HR-601 (Retarder)	6.35	14.80	-1.33	1361
•			DV TOOL SET AT 7000'		•		
St 1 - Lead: 7000' - 12224' (85% Excess)	1510	5224	Super H Cement: 0.5% Halad(R)-344 (Low Fluid Loss Control), 0.4% CFR-3 (Dispersant), 3 lbm/sk Kol-Seal (Lost Circulation Additive), 0.125 lbm/sk Poly-E-Flake (Lost Circulation Additive), 1 lbm/sk Salt (Salt), 0.3% HR-601 (Retarder)	8.25	13.20	1.63	1275

5. DIRECTIONAL PLAN

Please see attached directional plan

6. PRESSURE CONTROL EQUIPMENT

Surface: 0 - 545 None.

Intermediate: <u>0 - 4350</u>' Intermediate hole will be drilled with a 13-5/8" 10M three ram stack w/ 5M annular preventer, & 10M Choke Manifold.

Production: 0 - 12224' Production hole will be drilled with a 13-5/8" 10M three ram stack w/ 5M annular preventer, & 10M Choke Manifold. Oxy requires the use of a 5M BOP stack for this well.

- a. All BOP's and associated equipment will be tested in accordance with Onshore Order #2 (250/5000 psi on rams for 10 minutes each and 250/3500 for 10 minutes for annular preventer, equal to 70% of working pressure) with a third party BOP testing service before drilling out the 13-3/8" casing shoe. Wellhead pressure rating will support this test and 13-3/8" casing will be protected from high pressure. Since the wellhead system is a multibowl design, this initial test will cover the requirements prior to drilling out the 9-5/8" casing shoe.
- b. Pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily driller's log. A 2" kill line and 3" choke line will be accommodated on the drilling spool below the ram-type BOP. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines, and choke manifold having a 5000 psi WP rating. Oxy requests that the system be tested at 5,000 psi WP rating.
- c. Oxy also requests a variance to connect the BOP choke outlet to the choke manifold using a co-flex hose made by Contitech Rubber Industrial KFT. It is a 3" ID x 35' flexible hose rated to 5,000 psi working pressure. It has been tested to 10,000 psi and is built to API Spec 16C. Once the flex line is installed it will be tied down with safety clamps. Please see attached certifications.
- d. See attached BOP & Choke manifold diagrams.

7. MUD PROGRAM:

Depth	Mud Wt ppg	Vis Sec	Fluid Loss	Type System
0-545'640	8.4 - 8.6	32 – 34	NC	Fresh Water /Spud Mud
545' - 4350'4125	9.8 - 10.2	28 – 29	NC	Brine Water
4350' - 7000'	8.6 - 8.8	28 - 29	NC	Brine Water
7000' – TD'	8.8 - 9.4	30 - 40	NC	Salt Gel

Remarks: Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times.

A. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal isolation.

8. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT

a. A Kelly cock will be in the drill string at all times.

- **b.** A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor unobstructed and readily accessible at all times.
- c. Hydrogen Sulfide detection equipment will be in operation after drilling out the surface casing shoe until the production casing is cemented. Breathing equipment will be on location upon drilling the surface casing shoe until total depth is reached. <u>If Hydrogen Sulfide is encountered, measured amounts and formations will be reported to the BLM</u>

9. LOGGING / CORING AND TESTING PROGRAM: See COA

- A. Mud Logger: Base of Surface Casing to TD.
- B. DST's: None.
- C. Open Hole Logs as follows: GR-NEU-DEN-RES from TD to Intermediate Casing. GR-NEU to surface. MWD-GR from kick-off point to TD.

10. POTENTIAL HAZARDS:

- A. H2S detection equipment will be in operation after drilling out the surface casing shoe until the production casing has been cemented. Breathing equipment will be on location from drilling out the surface shoe until production casing is cemented. If H2S is encountered the operator will comply with Onshore Order #6.
- B. The bottomhole pressure is anticipated to be 3883 psi.
- C. No abnormal temperatures or pressures are anticipated. The highest anticipated pressure gradient is 0.49 psi/ft. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely.

11. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon as possible after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 35 days. If production casing is run, then an additional 30 days will be needed to complete the well and construct surface facilities and/or lay flow lines in order to place well on production.

12. COMPANY PERSONNEL:

<u>Name</u>	<u>Title</u>	Office Phone	Mobile Phone
Carlos Mercado	Drilling Engineer	713-366-5418	281-455-3481
Sebastian Millan	Drilling Engineer Supervisor	713-350-4950	832-528-3268
Roger Allen	Drilling Superintendent	713-215-7617	281-682-3919
Douglas Chester	Drilling Manager	713-366-9124	713-918-9124



Weatherford*

Drilling Services

Proposal



OCCIDENTAL PERMIAN LTD.

NIMITZ 12 FEDERAL 3H

EDDY CO., NM

WELL FILE: PLAN 2

AUGUST 8, 2012

Weatherford International, Ltd.

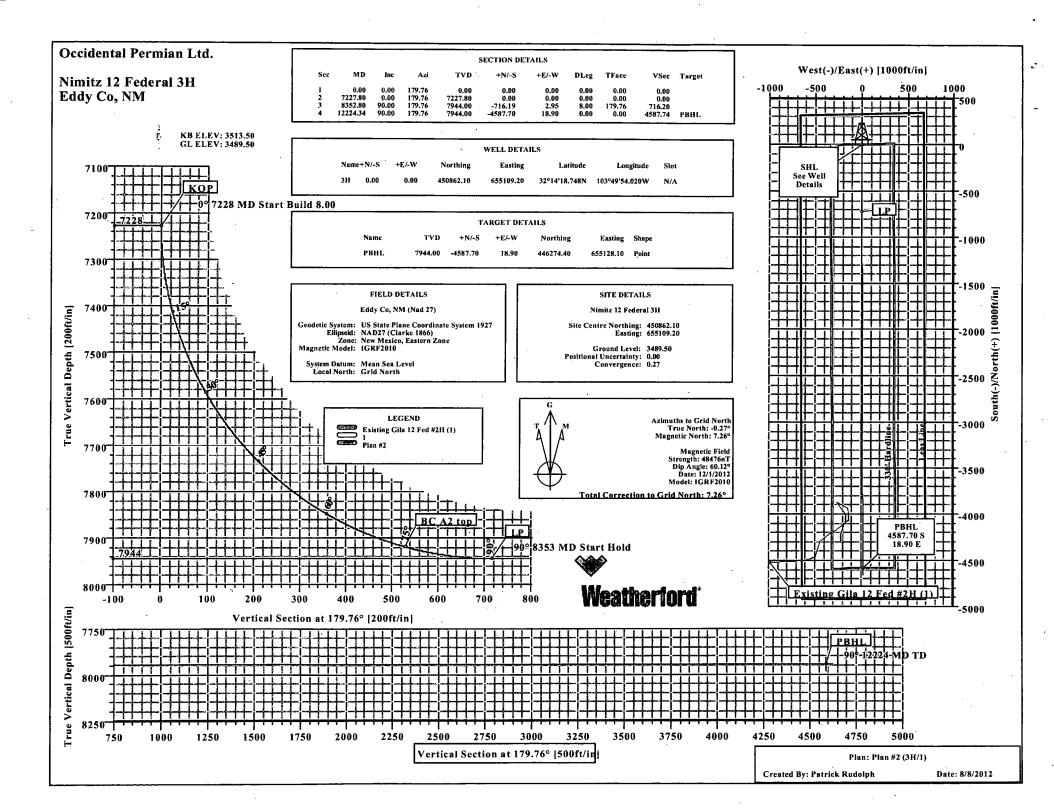
P.O. Box 61028

Midland, TX 79711 USA

+1.432.561.8892 Main

+1.432.561.8895 Fax

www.weatherford.com





Weatherford International Ltd. WFT Plan Report - X & Y's



Occidental Permian Ltd. Company:

Eddy Co, NM (Nad 27) Field: Nimitz 12 Federal 3H Site:

Well:

Wellpath: 1

8/8/2012

Time: 14:10:36 Well: 3H, Grid North

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

SITE 3513.5

Well (0.00N,0.00E,179.76Azi)

Db: Sybase

Plan: Plan #2

Principal:

Survey Calculation Method: Date Composed: Version:

Section (VS) Reference:

8/8/2012

Tied-to:

From Surface

Field:

Eddy Co, NM (Nad 27)

Map System: US State Plane Coordinate System 1927

Geo Datum: NAD27 (Clarke 1866)

Sys Datum: Mean Sea Level

Map Zone:

New Mexico, Eastern Zone

Minimum Curvature

Coordinate System: Geomagnetic Model: Well Centre

IGRF2010

Site:

Nimitz 12 Federal 3H

Site Position: From: Position Uncertainty:

Ground Level:

Well Position:

Current Datum:

Magnetic Data:

Field Strength:

Vertical Section:

Map

Northing: Easting:

Northing:

Easting:

450862.10 ft 655109.20 ft Latitude:

32 14

18 748 N 103 49

Longitude: North Reference: 54.020 W Grid

Grid Convergence:

0.27 deg

Well:

3H

+N/-S

+E/-W

3489.50 ft

0.00 ft

Slot Name:

Latitude:

32 14 18.748 N 54.020 W

Position Uncertainty: Wellpath: 1

0.00 ft 0.00 ft 0.00 ft

48476 nT

12/1/2012

Depth From (TVD)

ft

450862.10 ft 655109.20 ft

Height 3513.50 ft

Longitude:

103 49

Surface

Drilled From:

Tie-on Depth: **Above System Datum:**

0.00 ft Mean Sea Level

Declination: Mag Dip Angle:

7.53 deg 60.12 deg

+E/-W

Direction

ft

deg

7944.00

0.00

+N/-S

ft

0.00

179.76

Plan Section Information

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	TFO deg	Target
0.00	0.00	179.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7227.80	0.00	179.76	7227.80	0.00	0.00	0.00	0.00	0.00	0.00	
8352.80	90.00	179.76	7944.00	-716.19	2.95	8.00	8.00	0.00	179.76	
12224.34	90.00	179.76	7944.00	-4587.70	18.90	0.00	0.00	0.00	0.00	PBHL

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft		Comment
7200.00	0.00	179.76	7200.00	0.00	0.00	0.00	0.00	450862.10	655109.20		
7227.80	0.00	179.76	7227.80	0.00	0.00	0.00	0.00	450862.10	655109.20	KOP	
7250.00	1.78	179.76	7250.00	-0.34	0.00	0.34	8.00	450861.76	655109.20		
7300.00	5.78	179.76	7299.88	-3.64	0.01	3.64	8.00	450858.46	655109.21		
7350.00	9.78	179.76	7349.41	-10.40	0.04	10.40	8.00	450851.70	655109.24		
7400.00	13.78	179.76	7398.35	-20.60	0.08	20.60	8.00	450841.50	655109.28		
7450.00	17.78	179.76	7446.45	-34.19	0.14	34.19	8.00	450827.91	655109.34		
7500.00	21.78	179.76	7493.49	-51.11	0.21	51.11	8.00	450810.99	655109.41		
7550.00	25.78	179.76	7539.24	-71.26	0.29	71.26	8.00	450790.84	655109.49		
7600.00	29.78	179.76	7583.47	-94.55	0.39	94.56	8.00	450767.55	655109.59		
7650.00	33.78	179.76	7625.97	-120.88	0.50	120.88	8.00	450741.22	655109.70		
7700.00	37.78	179.76	7666.53	-150.10	0.62	150.10	8.00	450712.00	655109.82		
7750.00	41.78	179.76	7704.95	-182.09	0.75	182.09	8.00	450680.01	655109.95		
7800.00	45.78	179.76	7741.04	-216.67	0.89	216.67	8.00	450645.43	655110.09		
7850.00	49.78	179.76	7774.64	-253.69	1.05	253.69	8.00	450608.41	655110.25		
7900.00	53.78	179.76	7805.57	-292.96	1.21	292.96	8.00	450569.14	655110.41		
7950.00	57.78	179.76	7833.68	-334.29	1.38	334.30	8.00	450527.81	655110.58		



Weatherford International Ltd. WFT Plan Report - X & Y's



Field:

Site:

Company: Occidental Permian Ltd.

Eddy Co, NM (Nad 27) Nimitz 12 Federal 3H

Well: 3H Wellpath:

8250.00

8300.00

8352.80

8400.00

8500.00

8600.00

8700.00

8800.00

8900.00

9000.00

9100.00

9200.00

9300.00

9400.00

9500.00

9600.00

9700.00

9800.00

9900.00

10000.00

10100.00

10200.00

10300.00

10400.00

10500.00

10600.00

10700.00

10800.00

10900.00

11000.00

11100.00

11200.00

11300.00

11400.00

11500.00

11600.00

11700.00

11800.00

11900.00

12000.00

12100.00

12200.00

12224.34 90.00

81.78

85.78

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

90.00

179.76

179.76

179 76

179.76

179.76

179 76

179.76

179.76

179.76

179.76

179.76

179.76

179 76

179.76

179.76

179.76

179.76

179.76

179.76

179.76

179.76

179.76

179 76

179 76

179 76

179.76

179.76

179.76

179.76

179.76

179.76

179.76

179 76

179.76

179 76

179.76

179.76

179.76

179 76

179.76

179.76

179.76

179.76

7936.63

7942.05

7944 00

7944 00

7944.00

7944 00

7944.00

7944.00

7944.00

7944.00

7944.00

7944.00

7944 00

7944.00

7944.00

7944.00

7944.00

7944.00

7944.00

7944.00

7944.00

7944.00

7944 00

7944.00

7944.00

7944.00

7944.00

7944.00

7944.00

7944.00

7944.00

7944.00

7944 00

7944.00

7944 00

7944.00

7944.00

7944.00

7944 00

7944.00

7944.00

7944.00

7944.00

-613.74

-663.44

-716 19

-763.39

-863.39

-963 39

-1063.39

-1163.38

-1263.38

-1363.38

-1463 38

-1563.38

-1663.38

-1763.38

-1863.38

-1963.38

-2063.38

-2163.38

-2263.38

-2363.37

-2463.37

-2563.37

-2663.37

-2763.37

-2863 37

-2963.37

-3063.37

-3163.37

-3263.37

-3363.37

-3463.37

-3563.36

-3663.36

-3763.36

-3863.36

-3963.36

-4063.36

-4163.36

-4263.36

-4363.36

-4463.36

-4563.36

-4587.70

Date: 8/8/2012

613.75

663.44

716 20

763.39

863.39

963.39

1063.39

1163.39

1263.39

1363.39

1463 39

1563.39

1663.39

1763.39

1863.39

1963.39

2063.39

2163.39

2263.39

2363.39

2463.39

2563.39

2663.39

2763.39

2863.39

2963.39

3063.39

3163.39

3263.39

3363.39

3463.39

3563.39

3663.39

3763.39

3863.39

3963.39

4063.39

4163.39

4263.39

4363.39

4463.39

4563.39

4587.74

8.00

8.00

8.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

Co-ordinate(NE) Reference:

Vertical (TVD) Reference:

Section (VS) Reference:

Time: 14:10:36

450248.36

450198.66

450145.91

450098.71

449998.71

449898 71

449798.71

449698.72

449598.72

449498.72

449398 72

449298.72

449198.72

449098.72

448998.72

448898.72

448798.72

448698.72

448598.72

448498.73

448398.73

448298.73

448198.73

448098.73

447998.73

447898.73

447798.73

447698.73

447598.73

447498.73

447398 73

447298.74

447198.74

447098.74

446998.74

446898.74

446798.74

446698 74

446598.74

446498.74

446398.74

446298.74

446274.40

Page:

ΙP

Well: 3H, Grid North

SITE 3513.5

Well (0.00N,0.00E,179.76Azi) Db: Sybase

655111.73

655111.93 655112.15

655112.34 655112.76

655113.17

655113.58

655113.99

655114.40

655114.82

655115.23

655115.64

655116.05

655116.46

655116.88

655117.29

655117.70

655118.11

655118.52

655118.94

655119.35

655119.76

655120.58

655121.00

655121.41

655121.82

655122.23

655122.64

655123.06

655123.47

655123.88

655124.29

655124.70

655125.12

655125 53

655125.94

655126.35

655126.76

655127.18

655127.59

655128.00

655128.10

BC-A2 target

PBHL

655120.17

Wellpath: 1					<u>i</u>	Survey Calc	ulation Method:	Minimum	Db: Sybase	
Survey ·										
MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	MapN ft	MapE ft	Commen
8000.00	61.78	179.76	7858.85	-377.49	1.56	377.49	8.00	450484.61	655110.76	
8050.00	65.78	179.76	7880.94	-422.33	1.74	422.34	8.00	450439.77	655110.94	
8100.00	69.78	179.76	7899.84	-468.61	1.93	468.61	8.00	450393.49	655111.13	
8150.00	73.78	179.76	7915.48	-516.09	2.13	516.09	8.00	450346.01	655111.33	
8163.01	74.82	179.76	7919.00	-528.62	2.18	528.62	8.00	450333.48	. 655111.38	BC A2 top
8200.00	77.78	179.76	7927.76	-564.55	2.33	564.55	8.00	450297.55	655111.53	

2.53

2.73

2 95

3.14

3.56

3 97

4.38

4 79

5.20

5.62

6.03

6.44

6.85

7.26

7.68

8.09

8.50

8.91

9.32

9.74

10.15

10.56

10.97

11.38

11.80

12.21

12.62

13.03

13.44

13.86

14.27

14.68

15.09

15.50

15.92

16.33

16.74

17.15

17.56

17.98

18.39

18.80

18.90



Weatherford International Ltd. WFT Plan Report - X & Y's



Field:

Company: Occidental Permian Ltd.

Site:

Eddy Co, NM (Nad 27) Nimitz 12 Federal 3H

Date: 8/8/2012

Time: 14:10:36

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Well: 3H, Grid North SITE 3513.5

Well: Wellpath: 1 Section (VS) Reference:

Survey Calculation Method:

Well (0.00N,0.00E,179.76Azi) Minimum Curvature

Db: Sybase

Т	a	r	ø	e	ŧ:

Name	Description	n Dir.	TVD ft	+N/-S ft	+E/-W ft	Map Northing ft	Map Easting ft	< Latitude> Deg Min Sec	< Longitude> Deg Min Sec
PBHL			7944.00	-4587.70	18.90	446274.40	655128.10	32 13 33.348 N	103 49 54.049 W

Casing Points

Annotation

MD ft	TVD ft		
7227.80	7227.80	КОР	
8352.80	7944.00	LP	
12224.34	7944.00	PBHL	

Formations

MD ft	TVD ft	Formations	Lithology	Dip Angle deg	Dip Direction deg
8163.01	7919.00	BC A2 top		0.00	0.00
12200.00	7944.00	BC A2 target		0.00	0.00



Weatherford International Ltd.

Anticollision Report



Company: Field:

Reference Site:

Occidental Permian Ltd.

Eddy Co, NM (Nad 27)

Nimitz 12 Federal 3H

Reference Well: Reference Wellpath: 1 Date: 8/8/2012

Time: 14:18:43

Page:

Co-ordinate(NE) Reference:

Vertical (TVD) Reference:

Well: 3H, Grid North SITE 3513.5

Db: Sybase

NO GLOBAL SCAN: Using user defined selection & scan criteria Interpolation Method: MD

Depth Range: 30.00 to Maximum Radius: 10000.00 ft

Interval: 100.00 ft

Reference: Error Model: Scan Method: **Definitive Survey** ISCWSA Ellipse Closest Approach 3D

Error Surface:

Circle

Survey Program for Definitive Wellpath

ft

Date: 8/6/2012 Actual From To Validated: No

Survey

Version:

Toolcode

Tool Name

0.00 12224.34

Planned: Plan #2 V1

MWD

MWD - Standard

Summary

ft

Offset Wellpath Site Well Wellpath

Offset Reference MD ft

Ctr-Ctr Edge Separation Distance Distance Factor

Warning

Exist. Gila 12 Fed # Existing Gila 12 Fed 1 V0

12130.00 7941.39 1234.78 1136.16 .

MD

ft

12.52

Site: Well: Exist. Gila 12 Fed #2H Existing Gila 12 Fed #2H

Wellpath: 1 VO

Inter-Site Error:

0.00

ft

MD ft TVD ft MD ft TVD ft Ref ft Offset ft TFO-HS North deg ft East ft Distance Distance ft Factor ft 30.00 30.00 800.00 660.70 0.15 2.41 182.37 -4080.33 -169.09 4127.95 4125.53 1705.07 130.00 130.00 800.00 660.70 0.15 2.41 182.37 -4080.33 -169.09 417.95 4125.53 1705.07 330.00 330.00 1200.00 1052.73 0.60 3.39 182.40 -4030.59 -169.09 4103.56 4100.77 1469.54 330.00 330.00 1200.00 1052.73 0.60 3.39 182.40 -4030.59 -169.20 4097.63 4073.41 967.10 530.00 530.00 1200.00 1052.73 1.05 3.39 182.40 -4030.59 -169.20 4064.27 4059.83 914.95 630.00 630.00 1200.00 1052.73 1.50 3.39 182.40 -4030.59 -169.20 4064.27 4059.83 914.95 630.00 630.00 1200.00 1052.73	Warning
30.00 30.00 800.00 660.70 0.01 2.41 182.37 -4080.33 -169.09 4127.95 4125.53 1705.07 130.00 130.00 800.00 660.70 0.15 2.41 182.37 -4080.33 -169.09 4114.56 4111.99 1602.69 230.00 230.00 800.00 660.70 0.38 2.41 182.37 -4080.33 -169.09 4103.56 4100.77 1469.54 330.00 330.00 1200.00 1052.73 0.60 3.39 182.40 -4030.59 -169.20 4093.39 4089.40 1025.79 430.00 430.00 1200.00 1052.73 0.83 3.39 182.40 -4030.59 -169.20 4097.63 4073.41 967.10 530.00 530.00 1200.00 1052.73 1.05 3.39 182.40 -4030.59 -169.20 4077.63 4073.41 967.10 530.00 530.00 1200.00 1052.73 1.28 3.39 182.40 -4030.59 -169.20 4053.33 4048.66 868.43 730.00 730.00 1200.00 1052.73 1.50 3.99 182.40 -4030.59 -169.20 4053.33 4048.66 868.43 730.00 730.00 1200.00 1052.73 1.50 3.99 182.40 -4030.59 -169.20 4053.33 4048.66 868.43 730.00 730.00 1200.00 1052.73 1.50 3.99 182.40 -4030.59 -169.20 4048.40 4033.69 789.39 930.00 930.00 1200.00 1052.73 1.95 3.39 182.40 -4030.59 -169.20 4038.80 4033.69 789.39 930.00 930.00 1200.00 1052.73 1.95 3.39 182.40 -4030.59 -169.20 4035.24 4029.90 755.74 1030.00 1030.00 1231.25 1083.98 2.18 3.45 182.40 -4030.59 -169.20 4035.24 4029.90 755.74 1030.00 1330.00 1332.43 1185.15 2.40 3.66 182.41 -4029.73 -169.33 4033.37 4027.31 665.64 1230.00 1230.00 1437.12 1289.84 2.63 3.88 182.41 -4029.79 -169.56 4031.69 4024.68 575.77 1430.00 1430.00 1673.38 1526.08 3.07 4.42 182.41 -4026.09 -169.55 4030.22 4022.72 537.67 1430.00 1530.00 1892.89 1745.55 3.52 4.94 182.41 -4026.09 -169.55 4030.22 4022.72 537.67 1430.00 1630.00 1892.89 1745.55 3.52 4.94 182.41 -4021.68 -169.05 4026.17 4017.70 475.38 1730.00 1730.00 2094.80 1857.43 3.75 5.21 182.40 -4017.10 -168.14 4021.56 4012.15 427.50 1930.00 1930.00 1945.60 3.97 5.42 182.40 -4017.10 -168.14 4021.56 4012.15 427.50 1930.00 1930.00 2093.00 1945.60 3.97 5.42 182.40 -4017.10 -168.14 4021.56 4012.15 427.50 1930.00 1930.00 2093.00 3004.78 4.65 8.45 183.82 -3875.50 -258.72 3997.67 3984.67 300.70 2030.00 2300.00 3300.00 3004.78 4.65 8.45 183.82 -3875.50 -258.72 3997.67 3984.67 300.70 2300.00 2300.00 3300.00 3004.78 4.6	
130.00 130.00 800.00 660.70 0.15 2.41 182.37 -4080.33 -169.09 4114.56 4111.99 1602.69 230.00 230.00 800.00 660.70 0.38 2.41 182.37 -4080.33 -169.09 4103.56 4100.77 1469.54 330.00 330.00 1200.00 1052.73 0.60 3.39 182.40 -4030.59 -169.20 4093.39 4089.40 1025.79 430.00 430.00 1200.00 1052.73 0.83 3.39 182.40 -4030.59 -169.20 4077.63 4073.41 967.10 530.00 530.00 1200.00 1052.73 1.28 3.39 182.40 -4030.59 -169.20 4064.27 4059.83 914.95 630.00 730.00 1200.00 1052.73 1.50 3.39 182.40 -4030.59 -169.20 4064.27 4059.83 914.95 830.00 830.00 1200.00 1052.73 1.50 3.39 182.40 -4030.59 -169.20 4044.84 4039.95 826.79 830.00 830.00 1200.00 1052.73 1.73 3.39 182.40 -4030.59 -169.20 4038.80 4033.69 789.39 <th></th>	
230.00 230.00 800.00 660.70 0.38 2.41 182.37 -4080.33 -169.09 4103.56 4100.77 1469.54 330.00 330.00 1200.00 1052.73 0.60 3.39 182.40 -4030.59 -169.20 4093.39 4089.40 1025.79 430.00 430.00 1200.00 1052.73 0.83 3.39 182.40 -4030.59 -169.20 4077.63 4073.41 967.10 530.00 530.00 1200.00 1052.73 1.05 3.39 182.40 -4030.59 -169.20 4064.27 4059.83 914.95 630.00 630.00 1200.00 1052.73 1.28 3.39 182.40 -4030.59 -169.20 4064.27 4059.83 914.95 830.00 730.00 1200.00 1052.73 1.50 3.39 182.40 -4030.59 -169.20 4053.33 4048.66 868.43 730.00 730.00 1200.00 1052.73 1.50 3.39 182.40 -4030.59 -169.20 4034.84 4039.95 826.79 830.00 830.00 1200.00 1052.73 1.50 3.39 182.40 -4030.59 -169.20 4038.80 4033.69 789.39 930.00 930.00 1200.00 1052.73 1.95 3.39 182.40 -4030.59 -169.20 4038.80 4033.69 789.39 930.00 930.00 1200.00 1052.73 1.95 3.39 182.40 -4030.59 -169.20 4038.80 4033.69 789.39 130.00 1330.00 1231.25 1083.98 2.18 3.45 182.40 -4030.59 -169.20 4034.84 4029.90 755.74 130.00 1330.00 1332.43 1185.15 2.40 3.66 182.41 -4029.73 -169.23 4034.03 4028.41 717.03 1130.00 1330.00 1332.43 1185.15 2.40 3.66 182.41 -4029.06 -169.42 4032.74 4026.23 619.59 1330.00 1230.00 1437.12 1289.84 2.63 3.88 182.41 -4029.06 -169.42 4032.74 4026.23 619.59 1330.00 1330.00 1557.32 1410.04 2.85 4.15 182.41 -4027.79 -169.56 4031.69 4024.68 575.77 1430.00 1430.00 1673.38 1526.08 3.07 4.42 182.41 -4026.09 -169.55 4030.22 4022.72 537.67 1530.00 1530.00 1791.87 1644.55 3.30 4.70 182.41 -4023.85 -169.40 4028.33 4020.32 503.40 1630.00 1892.89 1745.55 3.52 4.94 182.41 -4021.68 -169.05 4026.17 4017.70 475.38 1730.00 1730.00 2004.80 1857.43 3.75 5.21 182.40 -4017.10 -168.14 4021.56 4012.15 427.50 1930.00 1930.00 2093.00 1945.60 3.97 5.42 182.40 -4017.10 -168.14 4021.56 4012.15 427.50 1930.00 1930.00 2093.00 1945.60 3.97 5.42 182.40 -4017.10 -168.14 4021.56 4012.15 427.50 1930.00 1930.00 2190.35 2042.93 4.20 5.66 182.39 -4015.05 -167.86 4019.44 4009.57 407.13 2030.00 2300.00 3300.00 3004.78 4.42 8.45 183.82 -3875.50 -258.72 3997.67 3984.67 307.60 2130.00 2300.00 3000.00 3004.	
330.00 330.00 1200.00 1052.73 0.60 3.39 182.40 -4030.59 -169.20 4093.39 4089.40 1025.79 430.00 430.00 1200.00 1052.73 0.83 3.39 182.40 -4030.59 -169.20 4077.63 4073.41 967.10 530.00 530.00 1200.00 1052.73 1.05 3.39 182.40 -4030.59 -169.20 4064.27 4059.83 914.95 630.00 630.00 1200.00 1052.73 1.28 3.39 182.40 -4030.59 -169.20 4053.33 4048.66 868.43 730.00 730.00 1200.00 1052.73 1.50 3.39 182.40 -4030.59 -169.20 4053.33 4048.66 868.43 730.00 730.00 1200.00 1052.73 1.50 3.39 182.40 -4030.59 -169.20 4044.84 4039.95 826.79 830.00 830.00 1200.00 1052.73 1.73 3.39 182.40 -4030.59 -169.20 4044.84 4039.95 826.79 830.00 930.00 1200.00 1052.73 1.95 3.39 182.40 -4030.59 -169.20 4038.80 4033.69 789.39 930.00 930.00 1200.00 1052.73 1.95 3.39 182.40 -4030.59 -169.20 4035.24 4029.90 755.74 1030.00 1030.00 1231.25 1083.98 2.18 3.45 182.40 -4030.40 -169.23 4034.03 4028.41 717.03 1130.00 1330.00 1332.43 1185.15 2.40 3.66 182.41 -4029.73 -169.33 4033.37 4027.31 665.64 1230.00 1230.00 1437.12 1289.84 2.63 3.88 182.41 -4029.79 -169.56 4031.69 4024.68 575.77 1430.00 1330.00 1557.32 1410.04 2.85 4.15 182.41 -4027.79 -169.56 4031.69 4024.68 575.77 1430.00 1430.00 1673.38 1526.08 3.07 4.42 182.41 -4026.09 -169.55 4030.22 4022.72 537.67 1530.00 1530.00 1791.87 1644.55 3.30 4.70 182.41 -4026.09 -169.55 4030.22 4022.72 537.67 1530.00 1530.00 1892.89 1745.55 3.52 4.94 182.41 -4021.68 -169.05 4026.17 4017.70 475.38 1730.00 1730.00 2004.80 1857.43 3.75 5.21 182.40 -4019.12 -168.49 4023.86 4014.89 448.76 1830.00 1830.00 2093.00 1945.60 3.97 5.42 182.40 -4017.10 -168.14 4021.56 4012.15 427.50 1930.00 1930.00 2190.35 2042.93 4.20 5.66 182.39 -4015.05 -167.86 4019.44 4009.57 407.13 2030.00 2330.00 3300.00 3004.78 4.42 8.45 183.82 -3875.50 -258.72 3997.67 3984.67 307.60 2130.00 2230.00 3300.00 3004.78 4.87 8.45 183.82 -3875.50 -258.72 3997.67 3984.67 307.60 2130.00 2230.00 3300.00 3004.78 4.87 8.45 183.82 -3875.50 -258.72 3955.12 3941.68 294.25	
430.00 430.00 1200.00 1052.73 0.83 3.39 182.40 -4030.59 -169.20 4077.63 4073.41 967.10 530.00 530.00 1200.00 1052.73 1.05 3.39 182.40 -4030.59 -169.20 4064.27 4059.83 914.95 630.00 630.00 1200.00 1052.73 1.28 3.39 182.40 -4030.59 -169.20 4044.84 4039.95 826.79 830.00 730.00 1200.00 1052.73 1.73 3.39 182.40 -4030.59 -169.20 4044.84 4039.95 826.79 830.00 830.00 1200.00 1052.73 1.73 3.39 182.40 -4030.59 -169.20 4038.80 4033.69 789.39 930.00 930.00 1200.00 1052.73 1.95 3.39 182.40 -4030.59 -169.20 4038.80 4033.69 789.39 930.00 930.00 1200.00 1052.73 1.95 3.39 182.40 -4030.59 -169.20 4038.80 4033.69 789.39 1030.00 1300.00 1231.25 1083.98 2.18 3.45 182.40 -4030.40 -169.20 4034.03 4028.41 717.03	
530.00 530.00 1200.00 1052.73 1.05 3.39 182.40 -4030.59 -169.20 4064.27 4059.83 914.95 630.00 630.00 1200.00 1052.73 1.28 3.39 182.40 -4030.59 -169.20 4064.27 4059.83 914.95 730.00 730.00 1200.00 1052.73 1.50 3.39 182.40 -4030.59 -169.20 4044.84 4039.95 826.79 830.00 830.00 1200.00 1052.73 1.73 3.39 182.40 -4030.59 -169.20 40438.80 4033.69 789.39 930.00 930.00 1200.00 1052.73 1.95 3.39 182.40 -4030.59 -169.20 4038.80 4033.69 789.39 930.00 930.00 1200.00 1052.73 1.95 3.39 182.40 -4030.40 -169.23 4034.03 4028.41 717.03 130.00 130.00 1330.00 1332.43 1185.15 2.40 3.66 182.41 -4029.73 -169.23 4034.03 4028.41 717.03 1330.00 1437.12 1289.84	
630.00 630.00 1200.00 1052.73 1.28 3.39 182.40 -4030.59 -169.20 4053.33 4048.66 868.43 730.00 730.00 1200.00 1052.73 1.50 3.39 182.40 -4030.59 -169.20 4044.84 4039.95 826.79 830.00 830.00 1200.00 1052.73 1.73 3.39 182.40 -4030.59 -169.20 4038.80 4033.69 789.39 930.00 930.00 1200.00 1052.73 1.95 3.39 182.40 -4030.59 -169.20 4038.80 4033.69 789.39 930.00 1030.00 1231.25 1083.98 2.18 3.45 182.40 -4030.59 -169.20 4035.24 4029.90 755.74 1030.00 1330.00 1332.43 1185.15 2.40 3.66 182.41 -4029.73 -169.33 4033.37 4027.31 665.64 1230.00 1230.00 1437.12 1289.84 2.63 3.88 182.41 -4029.73 -169.33 4033.37 4027.31 665.64 1230.00 1330.00 1557.32 1410.04 2.85 4.15 182.41 -4027.79 -169.56 4031.69 4024.68 575.77 1430.00 1430.00 1673.38 1526.08 3.07 4.42 182.41 -4026.09 -169.55 4030.22 4022.72 537.67 1530.00 1530.00 1791.87 1644.55 3.30 4.70 182.41 -4023.85 -169.40 4028.33 4020.32 503.40 1630.00 1630.00 1892.89 1745.55 3.52 4.94 182.41 -4021.68 -169.05 4026.17 4017.70 475.38 1730.00 1730.00 2004.80 1857.43 3.75 5.21 182.40 -4019.12 -168.49 4023.86 4014.89 448.76 1830.00 1830.00 2093.00 1945.60 3.97 5.42 182.40 -4017.10 -168.14 4021.56 4012.15 427.50 1930.00 230.00 3300.00 3004.78 4.42 8.45 183.82 -3875.50 -258.72 3997.67 3984.67 307.60 2130.00 2230.00 230.00 3300.00 3004.78 4.87 8.45 183.82 -3875.50 -258.72 3955.12 3941.68 294.25	•
630.00 630.00 1200.00 1052.73 1.28 3.39 182.40 -4030.59 -169.20 4053.33 4048.66 868.43 730.00 730.00 1200.00 1052.73 1.50 3.39 182.40 -4030.59 -169.20 4044.84 4039.95 826.79 830.00 830.00 1200.00 1052.73 1.73 3.39 182.40 -4030.59 -169.20 4038.80 4033.69 789.39 930.00 930.00 1200.00 1052.73 1.95 3.39 182.40 -4030.59 -169.20 4035.24 4029.90 755.74 1030.00 1030.00 1231.25 1083.98 2.18 3.45 182.40 -4030.40 -169.23 4034.03 4028.41 717.03 1130.00 1130.00 1332.43 1185.15 2.40 3.66 182.41 -4029.73 -169.33 4033.37 4027.31 665.64 1230.00 1230.00 1437.12 1289.84 2.63 3.88 182.41 -4029.73 -169.33 4032.74 4026.23 619.59 1330.00 1330.00 1557.32 1410.04 2.85 4.15 182.41 -4027.79 -169.56 4031.69 4024.68 575.77 1430.00 1430.00 1673.38 1526.08 3.07 4.42 182.41 -4026.09 -169.55 4030.22 4022.72 537.67 1530.00 1530.00 1791.87 1644.55 3.30 4.70 182.41 -4023.85 -169.40 4028.33 4020.32 503.40 1630.00 1630.00 1892.89 1745.55 3.52 4.94 182.41 -4021.68 -169.05 4026.17 4017.70 475.38 1730.00 1730.00 2004.80 1857.43 3.75 5.21 182.40 -4019.12 -168.49 4023.86 4014.89 448.76 1830.00 1830.00 2093.00 1945.60 3.97 5.42 182.40 -4017.10 -168.14 4021.56 4012.15 427.50 1930.00 230.00 3300.00 3004.78 4.42 8.45 183.82 -3875.50 -258.72 3997.67 3984.67 307.60 2130.00 2230.00 230.00 3300.00 3004.78 4.87 8.45 183.82 -3875.50 -258.72 3997.67 3984.67 307.60 2230.00 2230.00 3300.00 3004.78 4.87 8.45 183.82 -3875.50 -258.72 3955.12 3941.68 294.25	•
730.00 730.00 1200.00 1052.73 1.50 3.39 182.40 -4030.59 -169.20 4044.84 4039.95 826.79 830.00 830.00 1200.00 1052.73 1.73 3.39 182.40 -4030.59 -169.20 4038.80 4033.69 789.39 930.00 930.00 1200.00 1052.73 1.95 3.39 182.40 -4030.59 -169.20 4035.24 4029.90 755.74 1030.00 1030.00 1231.25 1083.98 2.18 3.45 182.40 -4030.40 -169.23 4034.03 4028.41 717.03 1130.00 1130.00 1332.43 1185.15 2.40 3.66 182.41 -4029.73 -169.33 4033.37 4027.31 665.64 1230.00 1230.00 1437.12 1289.84 2.63 3.88 182.41 -4029.06 -169.42 4032.74 4026.23 619.59 1330.00 1557.32 1410.04 2.85 4.15 182.41 -4027.79 -169.56 4031.69 4024.68 575.77 1430.00 1430.00 1673.38 1526.08 3.07 4.42 182.41 -4026.09 -169.55 4030.22 4022.72 537.67 1530.00 1530.00 1791.87 1644.55 3.52 4.94 182.41 -4023.85 -169.40 4028.33 4020.32 503.40 1630.00 1630.00 1892.89 1745.55 3.52 4.94 182.41 -4021.68 -169.05 4026.17 4017.70	
830.00 830.00 1200.00 1052.73 1.73 3.39 182.40 -4030.59 -169.20 4038.80 4033.69 789.39 755.74 1030.00 930.00 1200.00 1052.73 1.95 3.39 182.40 -4030.59 -169.20 4035.24 4029.90 755.74 1030.00 1030.00 1231.25 1083.98 2.18 3.45 182.40 -4030.40 -169.23 4034.03 4028.41 717.03 1130.00 1130.00 1332.43 1185.15 2.40 3.66 182.41 -4029.73 -169.33 4033.37 4027.31 665.64 1230.00 1230.00 1437.12 1289.84 2.63 3.88 182.41 -4029.06 -169.42 4032.74 4026.23 619.59 1330.00 1330.00 1557.32 1410.04 2.85 4.15 182.41 -4027.79 -169.56 4031.69 4024.68 575.77 1430.00 1430.00 1673.38 1526.08 3.07 4.42 182.41 -4026.09 -169.55 4030.22 4022.72 537.67 1530.00 1530.00 1791.87 1644.55 3.30 4.70 182.41 -4023.85 -169.40 4028.33 4020.32 503.40 1630.00 1630.00 1892.89 1745.55 3.52 4.94 182.41 -4021.68 -169.05 4026.17 4017.70 475.38 1730.00 1730.00 2004.80 1857.43 3.75 5.21 182.40 -4019.12 -168.49 4023.86 4014.89 448.76 1830.00 1830.00 2093.00 1945.60 3.97 5.42 182.40 -4017.10 -168.14 4021.56 4012.15 427.50 1930.00 2190.35 2042.93 4.20 5.66 182.39 -4015.05 -167.86 4019.44 4009.57 407.13 2030.00 230.00 3300.00 3004.78 4.42 8.45 183.82 -3875.50 -258.72 3975.19 3961.97 300.70 2230.00 230.00 3300.00 3004.78 4.65 8.45 183.82 -3875.50 -258.72 3955.12 394	
930.00 930.00 1200.00 1052.73 1.95 3.39 182.40 -4030.59 -169.20 4035.24 4029.90 755.74 1030.00 1030.00 1231.25 1083.98 2.18 3.45 182.40 -4030.40 -169.23 4034.03 4028.41 717.03 1130.00 1130.00 1332.43 1185.15 2.40 3.66 182.41 -4029.73 -169.33 4033.37 4027.31 665.64 1230.00 1230.00 1437.12 1289.84 2.63 3.88 182.41 -4029.06 -169.42 4032.74 4026.23 619.59 1330.00 1330.00 1557.32 1410.04 2.85 4.15 182.41 -4027.79 -169.56 4031.69 4024.68 575.77 1430.00 1430.00 1673.38 1526.08 3.07 4.42 182.41 -4026.09 -169.55 4030.22 4022.72 537.67 1530.00 1530.00 1791.87 1644.55 3.30 4.70 182.41 -4023.85 -169.40 4028.33 4020.32 503.40 1630.00 1630.00 1892.89 1745.55 3.52 4.94 182.41 -4021.68 -169.05 4026.17 4017.70 475.38 1730.00 1730.00 2004.80 1857.43 3.75 5.21 182.40 -4019.12 -168.49 4023.86 4014.89 448.76 1830.00 1830.00 2093.00 1945.60 3.97 5.42 182.40 -4019.12 -168.49 4023.86 4014.89 448.76 1830.00 1930.00 2190.35 2042.93 4.20 5.66 182.39 -4015.05 -167.86 4019.44 4009.57 407.13 2030.00 2030.00 3300.00 3004.78 4.42 8.45 183.82 -3875.50 -258.72 3997.67 3984.67 307.60 2130.00 2230.00 2330.00 3300.00 3004.78 4.65 8.45 183.82 -3875.50 -258.72 3975.19 3961.97 300.70 2230.00 2230.00 2330.00 3300.00 3004.78 4.87 8.45 183.82 -3875.50 -258.72 3955.12 3941.68 294.25	
1130.00 1130.00 1332.43 1185.15 2.40 3.66 182.41 -4029.73 -169.33 4033.37 4027.31 665.64 665.64 1230.00 1230.00 1437.12 1289.84 2.63 3.88 182.41 -4029.06 -169.42 4032.74 4026.23 619.59 619.59 1330.00 1330.00 1557.32 1410.04 2.85 4.15 182.41 -4027.79 -169.56 4031.69 4024.68 575.77 57.77 1430.00 1673.38 1526.08 3.07 4.42 182.41 -4026.09 -169.55 4030.22 4022.72 537.67 1530.00 1530.00 1791.87 1644.55 3.30 4.70 182.41 -4023.85 -169.40 4028.33 4020.32 503.40 1630.00 1630.00 1892.89 1745.55 3.52 4.94 182.41 -4021.68 -169.05 4026.17 4017.70 475.38 1730.00 1730.00 2004.80 1857.43 3.75 5.21 182.40 -4019.12 -168.49 4023.86 4014.89 448.76 1830.00 1830.00 2093.00 1945.60 3.97 5.42 182.40 -4017.10 -168.14 4021.56 4012.15 427.50 1930.00 230.00 3300.00 3004.78 4.20 5.66 182.39 -4015.05 -167.86 4019.44 4009.57 407.13 2030.00 230.00 3300.00 3004.78 4.65 8.45 183.82 -3875.50 -258.72 3975.19 3961.97 300.70 2230.00 2230.00 3300.00 3004.78 4.87 8.45 183.82 -3875.50 -258.72 3955.12 3941.68 294.25	
1130.00 1130.00 1332.43 1185.15 2.40 3.66 182.41 -4029.73 -169.33 4033.37 4027.31 665.64 665.64 1230.00 1230.00 1437.12 1289.84 2.63 3.88 182.41 -4029.06 -169.42 4032.74 4026.23 619.59 619.59 1330.00 1330.00 1557.32 1410.04 2.85 4.15 182.41 -4027.79 -169.56 4031.69 4024.68 575.77 57.77 1430.00 1673.38 1526.08 3.07 4.42 182.41 -4026.09 -169.55 4030.22 4022.72 537.67 1530.00 1530.00 1791.87 1644.55 3.30 4.70 182.41 -4023.85 -169.40 4028.33 4020.32 503.40 1630.00 1630.00 1892.89 1745.55 3.52 4.94 182.41 -4021.68 -169.05 4026.17 4017.70 475.38 1730.00 1730.00 2004.80 1857.43 3.75 5.21 182.40 -4019.12 -168.49 4023.86 4014.89 448.76 1830.00 1830.00 2093.00 1945.60 3.97 5.42 182.40 -4017.10 -168.14 4021.56 4012.15 427.50 1930.00 1930.00 2190.35 2042.93 4.20 5.66 182.39 -4015.05 -167.86 4019.44 4009.57 407.13 2030.00 2030.00 3300.00 3004.78 4.65 8.45 183.82 -3875.50 -258.72 3975.19 3961.97 300.70 2230.00 2230.00 3300.00 3004.78 4.87 8.45 183.82 -3875.50 -258.72 3955.12 3941.68 294.25	•
1230.00 1230.00 1437.12 1289.84 2.63 3.88 182.41 -4029.06 -169.42 4032.74 4026.23 619.59 1330.00 1330.00 1557.32 1410.04 2.85 4.15 182.41 -4027.79 -169.56 4031.69 4024.68 575.77 1430.00 1430.00 1673.38 1526.08 3.07 4.42 182.41 -4026.09 -169.55 4030.22 4022.72 537.67 1530.00 1530.00 1791.87 1644.55 3.30 4.70 182.41 -4023.85 -169.40 4028.33 4020.32 503.40 1630.00 1630.00 1892.89 1745.55 3.52 4.94 182.41 -4021.68 -169.05 4026.17 4017.70 475.38 1730.00 1730.00 2004.80 1857.43 3.75 5.21 182.40 -4019.12 -168.49 4023.86 4014.89 448.76 1830.00 1830.00 2093.00 1945.60 3.97 5.42 182.40 -4017.10 -168.14 4021.56 4012.15 427.50 1930.00 1930.00 2190.35 2042.93 4.20 5.66 182.39 -4015.05 -167.86 4019.44 4009.57 407.13 2030.00 2030.00 3300.00 30	
1330.00 1330.00 1557.32 1410.04 2.85 4.15 182.41 -4027.79 -169.56 4031.69 4024.68 575.77 1430.00 1430.00 1673.38 1526.08 3.07 4.42 182.41 -4026.09 -169.55 4030.22 4022.72 537.67 1530.00 1530.00 1791.87 1644.55 3.30 4.70 182.41 -4023.85 -169.40 4028.33 4020.32 503.40 1630.00 1630.00 1892.89 1745.55 3.52 4.94 182.41 -4021.68 -169.05 4026.17 4017.70 475.38 1730.00 1730.00 2004.80 1857.43 3.75 5.21 182.40 -4019.12 -168.49 4023.86 4014.89 448.76 1830.00 1830.00 2093.00 1945.60 3.97 5.42 182.40 -4017.10 -168.14 4021.56 4012.15 427.50 1930.00 1930.00 2190.35 2042.93 4.20 5.66 182.39 -4015.05 -167.86 4019.44 4009.57 407.13 2030.00 2030.00 3300.00 3004.78 4.42 8.45 183.82 -3875.50 -258.72 3997.67 3984.67 307.60 2130.00 2230.00 3300.00 3004.78 4.65 8.45 183.82 -3875.50 -258.72 3975.19 3961.97 300.70 2230.00 2230.00 3300.00 3004.78 4.87 8.45 183.82 -3875.50 -258.72 3955.12 3941.68 </td <td></td>	
1430.00 1430.00 1673.38 1526.08 3.07 4.42 182.41 -4026.09 -169.55 4030.22 4022.72 537.67 1530.00 1530.00 1791.87 1644.55 3.30 4.70 182.41 -4023.85 -169.40 4028.33 4020.32 503.40 1630.00 1630.00 1892.89 1745.55 3.52 4.94 182.41 -4021.68 -169.05 4026.17 4017.70 475.38 1730.00 1730.00 2004.80 1857.43 3.75 5.21 182.40 -4019.12 -168.49 4023.86 4014.89 448.76 1830.00 1830.00 2093.00 1945.60 3.97 5.42 182.40 -4017.10 -168.14 4021.56 4012.15 427.50 1930.00 1930.00 2190.35 2042.93 4.20 5.66 182.39 -4015.05 -167.86 4019.44 4009.57 407.13 2030.00 2030.00 3300.00 3004.78 4.42 8.45 183.82 -3875.50 -258.72 3975.19 3961.97 300.70 2130.00 2230.00 3300.00 3004.78 4.87 8.45 183.82 -3875.50 -258.72 3975.19 3961.97 300.70 2230.00 2230.00 3300.00 30	
1630.00 1630.00 1892.89 1745.55 3.52 4.94 182.41 -4021.68 -169.05 4026.17 4017.70 475.38 1730.00 1730.00 2004.80 1857.43 3.75 5.21 182.40 -4019.12 -168.49 4023.86 4014.89 448.76 1830.00 1830.00 2093.00 1945.60 3.97 5.42 182.40 -4017.10 -168.14 4021.56 4012.15 427.50 1930.00 1930.00 2190.35 2042.93 4.20 5.66 182.39 -4015.05 -167.86 4019.44 4009.57 407.13 2030.00 2030.00 3300.00 3004.78 4.42 8.45 183.82 -3875.50 -258.72 3997.67 3984.67 307.60 2130.00 2130.00 3300.00 3004.78 4.65 8.45 183.82 -3875.50 -258.72 3975.19 3961.97 300.70 2230.00 2230.00 3300.00 3004.78 4.87 8.45 183.82 -3875.50 -258.72 3955.12 3941.68 294.25	
1630.00 1630.00 1892.89 1745.55 3.52 4.94 182.41 -4021.68 -169.05 4026.17 4017.70 475.38 1730.00 1730.00 2004.80 1857.43 3.75 5.21 182.40 -4019.12 -168.49 4023.86 4014.89 448.76 1830.00 1830.00 2093.00 1945.60 3.97 5.42 182.40 -4017.10 -168.14 4021.56 4012.15 427.50 1930.00 1930.00 2190.35 2042.93 4.20 5.66 182.39 -4015.05 -167.86 4019.44 4009.57 407.13 2030.00 2030.00 3300.00 3004.78 4.42 8.45 183.82 -3875.50 -258.72 3997.67 3984.67 307.60 2130.00 2130.00 3300.00 3004.78 4.65 8.45 183.82 -3875.50 -258.72 3975.19 3961.97 300.70 2230.00 2230.00 3300.00 3004.78 4.87 8.45 183.82 -3875.50 -258.72 3955.12 3941.68 294.25	
1730.00 1730.00 2004.80 1857.43 3.75 5.21 182.40 -4019.12 -168.49 4023.86 4014.89 448.76 1830.00 1830.00 2093.00 1945.60 3.97 5.42 182.40 -4017.10 -168.14 4021.56 4012.15 427.50 1930.00 1930.00 2190.35 2042.93 4.20 5.66 182.39 -4015.05 -167.86 4019.44 4009.57 407.13 2030.00 2030.00 3300.00 3004.78 4.42 8.45 183.82 -3875.50 -258.72 3997.67 3984.67 307.60 2130.00 2130.00 3300.00 3004.78 4.65 8.45 183.82 -3875.50 -258.72 3975.19 3961.97 300.70 2230.00 2230.00 3300.00 3004.78 4.87 8.45 183.82 -3875.50 -258.72 3955.12 3941.68 294.25	
1830.00 1830.00 2093.00 1945.60 3.97 5.42 182.40 -4017.10 -168.14 4021.56 4012.15 427.50 427.50 1930.00 1930.00 2190.35 2042.93 4.20 5.66 182.39 -4015.05 -167.86 4019.44 4009.57 407.13 2030.00 2030.00 3300.00 3004.78 4.42 8.45 183.82 -3875.50 -258.72 3997.67 3984.67 307.60 2130.00 2130.00 3300.00 3004.78 4.65 8.45 183.82 -3875.50 -258.72 3975.19 3961.97 300.70 2230.00 2230.00 3300.00 3004.78 4.87 8.45 183.82 -3875.50 -258.72 3955.12 3941.68 294.25	
1930.00 1930.00 2190.35 2042.93 4.20 5.66 182.39 -4015.05 -167.86 4019.44 4009.57 407.13 2030.00 2030.00 3300.00 3004.78 4.42 8.45 183.82 -3875.50 -258.72 3997.67 3984.67 307.60 2130.00 2130.00 3300.00 3004.78 4.65 8.45 183.82 -3875.50 -258.72 3975.19 3961.97 300.70 2230.00 2230.00 3300.00 3004.78 4.87 8.45 183.82 -3875.50 -258.72 3955.12 3941.68 294.25	
2130.00 2130.00 3300.00 3004.78 4.65 8.45 183.82 -3875.50 -258.72 3975.19 3961.97 300.70 2230.00 2230.00 3300.00 3004.78 4.87 8.45 183.82 -3875.50 -258.72 3955.12 3941.68 294.25	
2230.00 2230.00 3300.00 3004.78 4.87 8.45 183.82,-3875.50 -258.72 3955.12 3941.68 294.25	**************************************
	•
.0320.00	
2330.00 2330.00 3300.00 3004.78 5.10 8.45 183.82 -3875.50 -258.72 3937.48 3923.82 288.25	1
2430.00 2430.00 3300.00 3004.78 5.32 8:45 183.82 -3875.50 -258.72 3922.32 3908.44 282.68	
2530.00 2530.00 3300.00 3004.78 5.55 8.45 183.82 -3875.50 -258.72 3909.65 3895.56 277.51	
2630.00 2630.00 3300.00 3004.78 5.77 8.45 183.82 -3875.50 -258.72 3899.51 3885.21 272.73	
2730.00 2730.00 3300.00 3004.78 6.00 8.45 183.82 -3875.50 -258.72 3891.91 3877.41 268.33	
2830.00 2830.00 3300.00 3004.78 6.22 8.45 183.82 -3875.50 -258.72 3886.87 3872.17 264.30	•
2930.00 2930.00 3325.97 3030.74 6.45 8.50 183.83 -3874.97 -259.24 3884.30 3869.34 259.54	
3030.00 3030.00 3400.00 3104.73 6.67 8.65 183.86 -3873.58 -261.21 3882.65 3867.31 253.14	
3130.00 3130.00 3400.00 3104.73 6.90 8.65 183.86 -3873.58 -261.21 3882.75 3867.20 249.72	
3230.00 3230.00 3400.00 3104.73 7.12 8.65 183.86 -3873.58 -261.21 3885.43 3869.66 246.33	•
3330.00 3330.00 3400.00 3104.73 7.35 8.65 183.86 -3873.58 -261.21 3890.68 3874.68 243.20	



Weatherford International Ltd. **Anticollision Report**



Company: Field:

Reference Site:

Occidental Permian Ltd. Eddy Co, NM (Nad 27) Nimitz 12 Federal 3H

Reference Well: Reference Wellpath: 1

Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Date: 8/8/2012

Well: 3H, Grid North SITE 3513.5

Time: 14:18:43

Db: Sybase

Page:

	Site: Well: Wellpath:		12 Fed #2 Gila 12 Fed							Inter-Site	e Error:	0.00	ft	
١	<u>.</u>	rence	Of	fset	Semi-M	ajor Axis		Offset	Location			Separation		
	MD	TVD	MD	TVD	Ref	Offset	TFO-HS	North	East	Distance	Distance	Factor	Warning	
	ft	ft	ft	ft	ft	ft	deg	ft	ft	ft	ft	_		
	3430.00	3430.00	3400.00	3104.73	7.57	8.65	183.86 -3	3873.58	-261.21	3898.49 3	882.26	240.31		
	3530.00	3530.00	3400.00	3104.73	7.79	9.65	183.86 -3	2872 58	-261 21	3908.84 3	802 30	237.66		1
	3630.00	3630.00	3400.00	3104.73	8.02		183.86 -3			3921.71 3		235.23		
1	3730.00	3730.00	3400.00	3104.73	8.24		183.86 -3			3937.09 3		233.01		
	3830.00	3830.00	4000.00	3614.54	8.47		182.11 -3			3947.58 3		222.74		
	3930.00	3930.00	4000.00	3614.54	8:69	9.25	182.11 -3	3937.34	-145.09	3955.03 3	937.08	220.37		
	4030.00	4030.00	4000.00	3614.54	8.92	9.25	182.11 -3	3037 34	-145 09	3964.98 3	946 81	218.19		
. [4130.00	4130.00	4000.00	3614.54	9.14		182.11 -			3977.43 3		216.20		.
	4230.00	4230.00	4000.00	3614.54	9.37		182.11 -3			3992.34 3	973.72	214.39	•	
	4330.00	4330.00	4000.00	3614.54	9.59	9.25	182.11 -3	3937.34	-145.09	4009.70 3	990.85	212.76		
	4430.00	4430.00	4000.00	3614.54	9.82	9.25	182.11 -	3937.34	-145.09	4029.46 4	010.38	211.29		
	4530.00	4530.00	4000.00	3614.54	10.04	9 25	182.11 -3	3937 34	-145 09	4051.59 4	032.29	209.97		
	4630.00	4630.00	4000.00	3614.54	10.27		182.11 -			4076.05 4		208.81		
	4730.00	4730.00	4900.00	4317.15	10.49		182.05 -4			4099.79 4		200.55		•
	4830.00	4830.00	4900.00	4317.15	10.72		182.05 -4			4111.76 4		198.95		
H	4930.00	4930.00	4900.00	4317.15	10.94	9.95	182.05 -4	4073.33	-145.61	4126.12 4	105.23	197.50		
	5030.00	5030.00	4900.00	4317.15	11.17	9 95	182.05 -4	4073 33	-145 61	4142.85 4	121.74	196.19		1
	5130.00	5130.00	4900.00	4317.15	11.39		182.05 -4			4161.92.4		195.02		
	5230.00	5230.00	4900.00	4317.15	11.62	9.95	182.05 -4	4073.33	-145.61	4183.29 4		193.97		
	5330.00	5330.00	5995.87	5333.69	11.84	11.39	184.24 -4	4193.02	-310.97	4204.61 4	181.38	180.97		
I	5430.00	5430.00	6000.00	5337.82	12.07	11.40	184.24	4193.04	-311.00	4206.30 4	182.84	179.27 .		
l	5530.00	5530.00	6000.00	5337.82	12.29	11 40	184.24	4193 NA	-311 00	4210.37 4	186 68	177.74		
ŀ	5630.00	5630.00	6000.00	5337.82	12.51		184.24 -			4216.80 4		176.34		ļ
	5730.00	5730.00	6000.00	5337.82	12.74		184.24			4225.58 4		175.06		l
	5830.00	5830.00	6000.00	5337.82	12.96	11.40	184.24 -	4193.04	-311.00	4236.72 4	212.35	173.90		ľ
	5930.00	5930.00	6000.00	5337.82	13.19	11.40	184.24 -4	4193.04	-311.00	4250.17 4	225.58	172.86		
	6030.00	6030.00	6000.00	5337.82	13.41	11 40	184.24	4193 NA	-311.00	4265.93 4	241 12	171.93		
Н	6130.00	6130.00	6000.00	5337.82	13.64		184.24 -4			4283.96 4		171.10		
	6230.00	6230.00	6000.00	5337.82	13.86		184.24			4304.25 4		170.38		
	6330.00	6330.00	6000.00	5337.82	14.09		184.24			4326.75 4	301.26	169.76		1
	6430.00	6430.00	7000.00	6264.09	14.31	12.62	185.94 -	4315.78	-449.28	4343.47.4	316.54	161.26		
	6530.00	6530:00	7000.00	6264.09	14.54	12.62	185.94 -4	4315 78	-449 28	4349.10 4	321 95	160.14		
	6630.00	6630.00	7000.00	6264.09	14.76		185.94 -4			4357.02 4		159.11		
H	6730.00	6730.00	7000.00	6264.09	14.99		185.94 -			4367.22 4		158.19		'
	6830.00	6830.00	7000.00	6264.09	15.21		185.94			4379.67 4		157.36		
	6930.00	6930.00	7000.00	6264.09	15.44	12.62	185.94	4315.78	-449.28	4394.37 4	366.31	156.62		
	7030.00	7030.00	7000.00	6264.09	15.66	12 62	185.94	4315 78	-449 28	4411.28 4	1383 00	155.97		
Н	7130.00	7130.00	7000.00	6264.09	15.89		185.94			4430.39 4		155.41		
П	7230.00	7230.00	7000.00	6264.09	16.11	12.62		4315.78		4451.66 4	1422.93	154.94		
	7330.00	7329.65	7000.00	6264.09	16.34	12.62			-449.28	4467.97 4		154.28		
	7430.00	7427.32	7000.00	6264.09	16.58	12.62	5.99 ~	4315.78	-449.28	4472.69 4	1443.49	153.18		
	7530.00	7521.11	7000.00	6264.09	16.84	12.62	6.05	4315.78	-449.28	4465.78 4	436.32	151.60		
	7630.00	7609.19	7000.00	6264.09	17.14	12.62			-449.28	4447.31 4		149.45		
	7730.00	7689.85	7000.00	6264.09	17.50	12.62			-449.28	4417.49 4		146.65		
	7830.00	7761.51	7000.00	6264.09	17.96	12.62			-449.28	4376.70 4		143.13		
	7930.00	7822.78	7000.00	6264.09	18.52	12.62	7.51 -	4315.78	-449.28	4325.42 4	1294.27	138.88		
	8030.00	7872.48	7820.27	6891.38	19.22	12.99	13 31	4497 13	-617.86	4260.95	1228 74	132.29		
	8130.00	7909.62	7832.00	6900.32	20.04	13.02		4498.23		4181.08 4		126.48		
	8230.00	7933.50	7832.00	6900.32	20.98	13.02		4498.23		4094.52 4		120.43		
	8330.00	7943.64	7842.33	6908.02	22.02	13.06		4499.20		4002.56		113.75		•
	8430.00	7944.00	7844.55	6909.65	23.15	13.06	31.53 -	4499.41	-633.68	3907.76	3871.33	107.25		
_	-, .,												·	· · · · · · · · · · · · · · · · · · ·



Weatherford International Ltd.

Anticollision Report



Company: Field:

Reference Site:

Reference Well:

Occidental Permian Ltd.

Eddy Co, NM (Nad 27)

Nimitz 12 Federal 3H

Reference Wellpath: 1

Co-ordinate(NE) Reference:

Date: 8/8/2012

Time: 14:18:43

Page:

Vertical (TVD) Reference:

Well: 3H, Grid North SITE 3513.5

Db: Sybase

Site: Exist. Gila 12 Fed #2H Well:

Wellnath:

Existing Gila 12 Fed #2H 1 V0

Inter-Site Error

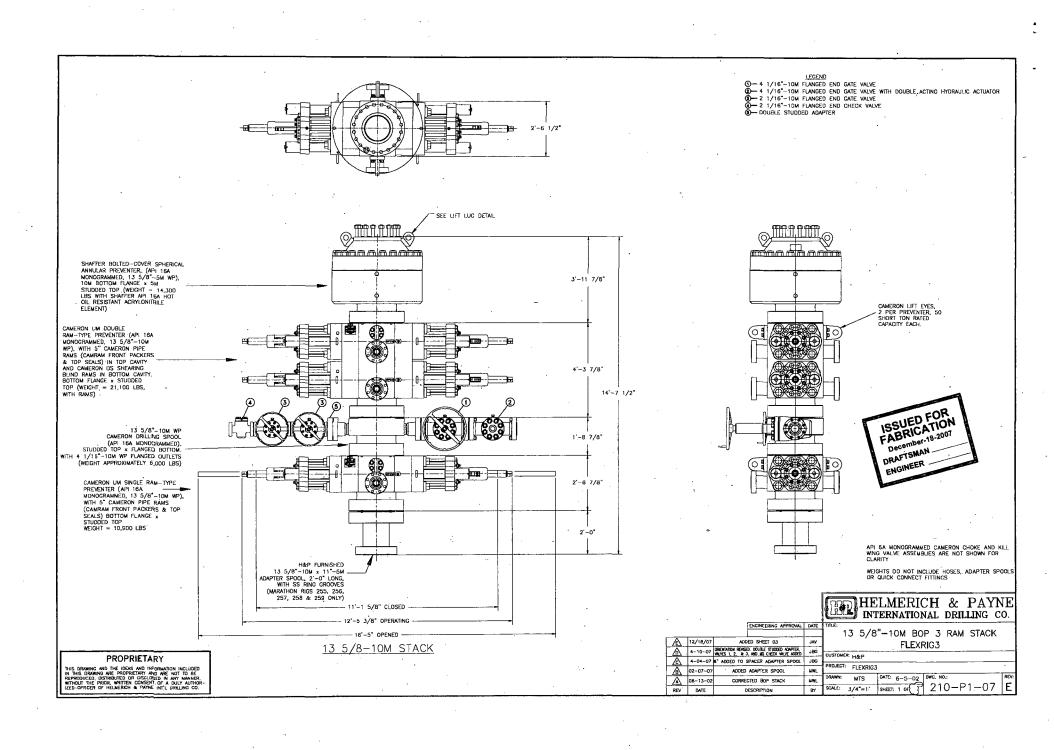
Wellpath:	1 V0								Inter-Site	Error:	0.00	ft
Refe	rence	Of	ffset	Semi-M	lajor Axis	Ot	ffset L	ocation	Ctr-Ctr	Edge S	Separation	
MD	TVD	MD	TVD	Ref	Offset	TFO-HS No		East	Distance		Factor	Warning
ft	ft	ft	ft	ft	ft	deg ft	t	ft	ft	ft		Ū
8530.00	7944.00	7846.71	6911.24	24.36	13.07	31.62 -4499			3813.12 3	775.36	100.98	
8630.00	7944.00	7848.89	6912.82	25.65	13.08	31.72 -4499			3718.76 3	679.61	94.97	
8730.00	7944.00	7851.07	6914.40	26.99	13.08	31.82 -4500	0.03	-638.11	3624.69 3	584.08	89.25	
8830.00	7944.00	7853.25	6915.97	28.39	13.09	31.91 -4500	0.24	-639.61	3530.95 3	488.82	83.82	
8930.00	7944.00	7863.00	6922.89	29.83	13.12	32.35 -4501	1.17	-646.41	3437.58 3	393.88	78.65	
9030.00	7944.00	7863.00	6922.89	31.32	13.12	32.35 -4501	1.17	-646.41	3344.54 3	299.25	73.84	
9130.00	7944.00	7863.00	6922.89	32.84	13.12	32.35 -4501			3251.91 3		69.32	•
9230.00	7944.00	7863.00	6922.89	34.38	13.12	32.35 -4501			3159.74 3		65.06	
9330.00	7944.00	7863.00	6922.89	35.96	13.12	32.35 -4501			3068.05 3		61.17	
9430.00	7944.00	7863.00	6922.89	37.55		32.35 -4501			2976.89 2		57.41	
3400.00	. 5-4.00	. 000.00	3322.0 3	37.00	10.12	UZ.00 -4001	1.17	-070.71	2010.00 2	020.07		
9530.00	7944.00	7870.88	6928.37	39.17	13.15	32.70 -4501	1.92	-652.03	2886.29 2	832.69	53.85	
9630.00	7944.00	7873.83	6930.39	40.80	13.17	32.84 -4502			2796.34 2		50.52	
9730.00	7944.00	7876.73	6932.37	42.45	13.18	32.97 -4502			2707.08 2		47.41	
9830.00	7944.00	7879.57	6934.29	44.11	13.19	33.10 -4502			2618.58 2		44.48	
9930.00	7944.00	7882.35	6936.16	45.78	13.20	33.22 -4502			2530.94 2		41.73	
**	;					33.22 1332						
10030.00	7944.00	7885.09	6937.98	47.47	13.21	33.35 -4503	3.22	-662.41	2444.23 2	381.79	39.14	
10130.00	7944.00	7894.00	6943.84	49.16	13.25	33.75 -4504	1.01	-669.08	2358.59 2	294.32	36.70	
10230.00	7944.00	7894.00	6943.84	50.87	13.25	33.75 -4504	1.01	-669.08	2274.07 2	208.01	34.43	
10330.00	7944.00	7894.00	6943.84	52.58	13.25	33.75 -4504		-669.08	2190.85 2		32.29	
10430.00	7944.00	7897.56	6946.14	54.30	13.26	33.92 -4504			2109.08 2		30.31	
10530.00	7944.00	7902.83	6949.52	56.02	13.29	34.16 -4504	4.74	-675.80	2028.93 1	957.53	28.42	
10630.00	7944.00	7907.46	6952.46	57.75	13.31	34.37 -4505	5.09	-679.35	1950.60 1	877.37	26.64	
10730.00	7944.00	7911.54	6955.03	59.49	13.33	34.56 -4505	5.38	-682.51	1874.31 1	799.27	24.98	
10830.00	7944.00	7915.17	6957.30	61.23	13.35	34.73 -4505	5.63	-685.34	1800.33 1	723.48	23.43	
10930.00	7944.00	7918.43	6959.32	62.98	13.36	34.88 -4505			1728.95 1		21.98	
											,	
11030.00	7944.00	7921.36	6961.12	64.73	13.37	35.01 -4506			1660.53 1		20.64	
11130.00	7944.00	7925.00	6963.34	66.48	13.39	35.18 -4506			1595.43 1		19.41	
11230.00	7944.00	7925.00	6963.34	68.24	13.39	35.18 -4506			1534.08 1		18.29	
11330.00	7944.00	7925.00	6963.34	70.00	13.39	35.18 -4506			1476.96 1		17.25	
11430.00	7944.00	7931.01	6966.98	71.76	13.42	35.46 -4506	3.54	-697.84	1424.55 1	337.18	16.30	
11530.00	7944.00	7932.92	6968.13	73.53	13.44	35.55 -4506	5.64	-699.37	1377.42 1	288.35	15.46	
11630.00	7944.00	7934.66	6969.16	75.30	13.45	35.63 -4506			1336.12 1		14.72	
11730.00	7944.00	7936.24	6970.10	77.07	13.45	35.70 -4506			1301.20 1		14.09	
11830.00	7944.00	7937.69	6970.96	78.84	13.46	35.77 -4506			1273.20 1		13.55	
11930.00	7944.00	7939.02	6971.75	80.62	13.47	35.83 -4506			1252.56 1		13.11	
-						- 2.00					10	
12030.00	7944.00	7940.26	6972.48	82.40	13.48	35.89 -4506	3.95	-705.26	1239.68 1	142.58	12.77	
12130.00	7944.00	7941.39	6973.15	84.18	13.48	35.94 -4506			1234.78 1		12.52	

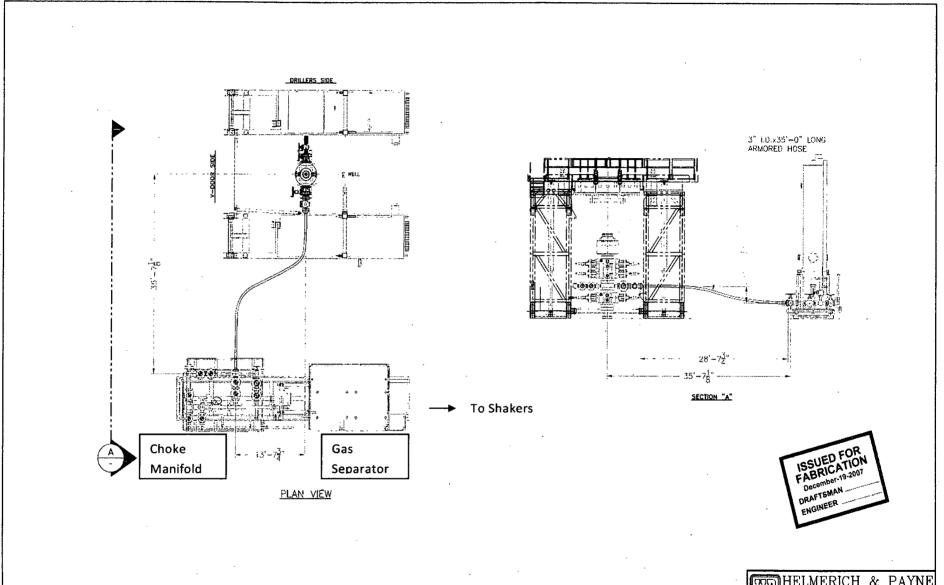


Weatherford Drilling Services

GeoDec v5.03

Report Date:	August 07, 2012		
Job Number: Customer:	Occidental Permian	Ltd.	
Well Name: API Number:	Nimitz 12 Federal		
Rig Name:			
Location: Block:	Eddy Co, NM (Nad 2	7)	
Engineer:	KRN		
US State Plane 19	27	Geodetic Latitude / Longitude	
System: New Mex	ico East 3001 (NON-EXACT)	System: Latitude / Longitude	•••
Projection: SPC27	Transverse Mercator	Projection: Geodetic Latitude an	d Longitude
Datum: NAD 1927	(NADCON CONUS)	Datum: NAD 1927 (NADCON C	ONUS)
Ellipsoid: Clarke 1	366	Ellipsoid: Clarke 1866	•
North/South 4508	62.100 USFT	Latitude 32.2385412 DEG	
East/West 655109	9.200 USFT	Longitude -103.8316722 DEG	
Grid Convergence			
Total Correction: -	+7.26°		
Geodetic Location	WGS84 Elevation	= 0.0 Meters	
	32.23854° N 32°	14 min 18.748 sec	
Longitude = 10	03.83167° W 103°	49 min 54.020 sec	
Magnetic Declinati	on = 7.53°	[True North Offset]	
Local Gravity =	.9988 g	CheckSum =	6528
Local Field Streng	th = 48472 nT	Magnetic Vector X =	23940 nT
Local Field Streng	th = 48472 nT 60.12°	Magnetic Vector X = Magnetic Vector Y =	23940 nT 3164 nT
-		Magnetic Vector Y =	





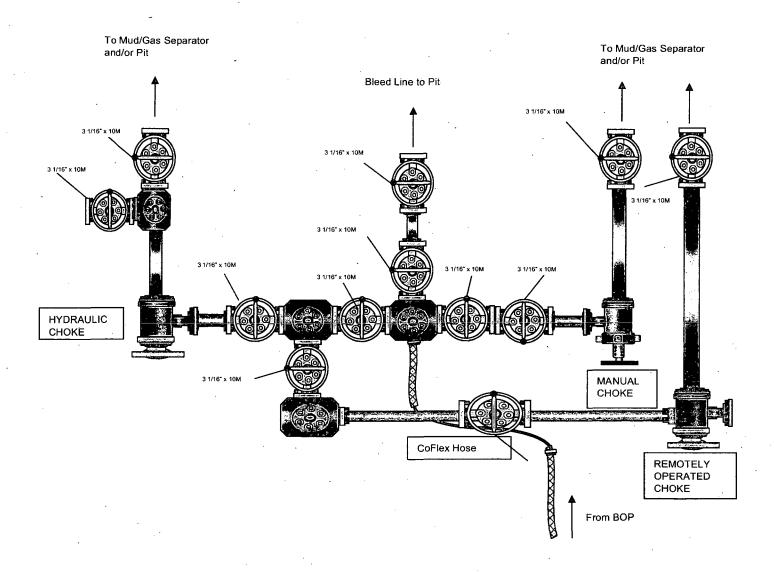
PROPRIETARY

THIS DRAWING AND THE DEAS AND PHORMATION INCLUDED IN THIS DRAWING ME PROPRIETARY AND ARE NOT TO BE REPRODUCED. DISTRIBUTION OF INSCLUDED IN AN AMANGE, WITHOUT THE PROPER METHOD CARREST OF A DILLY ADMINISTRA

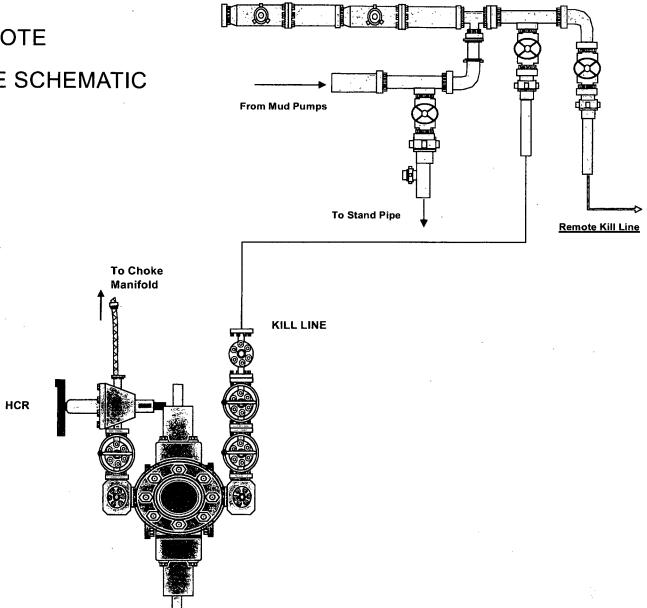
HELMERICH & PAYNE INTERNATIONAL DRILLING CO.

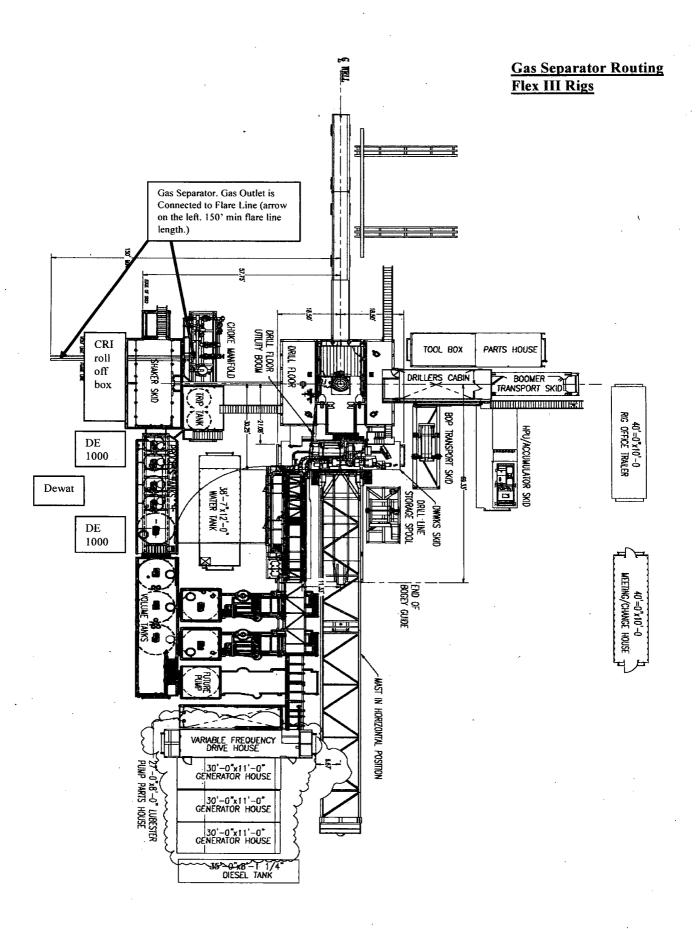
			ENGINEERING APPROVAL	DATE	CHOKE LINE SYSTEM
	Ą			<u> </u>	FLEXRIG3
Ì	Ä				CUSTOMER:
	\	12/18/07	REMOVED SHEET TOTAL CALLOUT	JAV	DRAKH: JBC DATE: 4-10-07 DWG, NO.: REV.
	REV	EATE	DESCRIPTION	ΒY	SCALE: 3/16"=1" SHEET: 2 OF - 210-P1-07 A

10M CHOKE MANIFOLD CONFIGURATION



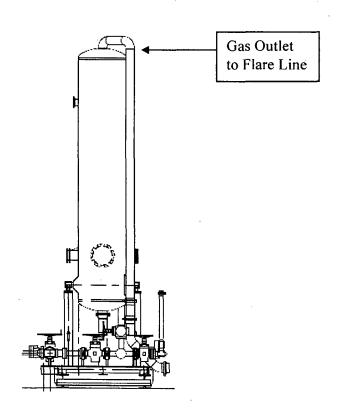
10M REMOTE KILL LINE SCHEMATIC





Choke Line from BOP Gas Outlet to Flare Line 13' - 7\frac{3}{4}

Choke Manifold - Gas Separator (Side View)



Coflex Hose Certification



Fluid Technology Quality Document

CERTIFICATE OF CONFORMITY

Supplier: CONTITECH RUBBER INDUSTRIAL KFT.

Equipment: 6 pcs. Choke and Kill Hose with installed couplings

3" x 10,67 m WP: 10000 psi

Supplier File Number : 412638

Date of Shipment

: April. 2008

Customer

: Phoenix Beattie Co.

Customer P.o.

: 002491

Referenced Standards

/ Codes / Specifications: API Spec 16 C

Serial No.: 52754,52755,52776,52777,52778,52782

STATEMENT OF CONFORMITY

We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevant acceptance criteria and design requirements.

COUNTRY OF ORIGIN HUNGARY/EU

Signed:

ontiTech Rubber Industrial Kft. Quality Control Dept.

Position: Q.C. Manager

Date: 04. April. 2008

	•	,																																									/	_
			-11	4												ļ				1	1					1		1	1				-		1	ի				ΛL	- A			
2			1	ST CO	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			di k	<u> </u>							1				1					-								-		C	1		T	4 4		E III	i i	起は	£1
F	0 :	,	1		1 1 150	747 · · · · · · · · · · · · · · · · · ·		1							١			ı									See Jan See See See								ı.			-		(<u>4</u>)	20	L LU	le _l	
T. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		4 3.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1.1	11	32	ľ					And in Contraction of the Contra						1												,		The Particular and				-	A		•				
		,	7			4	Į,									1								-					Ī		,								3					
9		*			Į.	7	k					T	Ī						•																				7					
		+		•	7	4	:	7.	÷			Î		b				-	Ī	Т		d								8	0		Ī					T	I					
		4		ŀ		1	-											1	ŀ		ĺ		1	Ì				-					Ì				1	1						
		-			7	1			•						1	-		Ī	-			1	1				1	**									-	Annual Control	1					
		Į.	7		-			;	1			1				-							İ				1	Ť				1				S. C. C. STATE OF STA	-		7					
П	П	1	T		T	T	*****		1		1				7117						***************************************		1				†				+	1	-		de de remana familia									
		ļ.		i					1	1					-	-	-					1	-					Ī		7	-	ļ	*			*	-							
H	-				7						-					Ī						1		-			†	-				Ť			*****				1					•
15																							-									٠.		М	-	÷	÷	Tim with one						

- PHOENIX Beattie **Material Identification Certificate** PA No 006330 Client HELMERICH & PAYNE INT'L DRILLING Coent Ref 370-369-001 Page Part No Description Material Desc Material Spec Qty WO No | Batch No Test Cert No Bin No Drg No Issue No HP16CK3A-35-4F1 3" 10K 16C C&K HOSE x 35Tt OAL 2491 52777/HB84 MATER SECK3-HPF3 LIFTING & SAFETY EQUIPMENT TO 2440 002440 N/STK SC725-200CS SAFETY CLAMP 200M 7.25T CARBON STEEL 2519 H665 22C SC725-132CS SAFETY CLAMP 132M 7.25T CARBON STEEL H139 2242 22

We hereby certify that these goods have been inspected by our Quality Management System, and to the best of our knowledge are found to conform to relevant industry standards within the requirements of the purchase order as issued to Phoenix Beattle Corporation.



Form No 100/12

- PHOENIX Beattie

Phoenix Beattle Corp 11536 Brittscore Park Brive Houston, TX 77041 Tel: (832) 327-0141 Fax: (832) 327-0148 E-mail mail@phoenixbeattle.com www.phoenixbeattle.com

Delivery Note

Customer Order Number 370-369-001 Delivery Note Number 00	3078 Page	1
Customer / Invoice Address HELMERICH & PAYNE INT'L DRILLING CO 1437 SOUTH BOULDER TULSA, OK 74119 Delivery / Address HELMERICH & PAYNE IDC ATTN: JOE STEPHENSON - RIG 370 13609 INDUSTRIAL ROAD HOUSTON, TX 77015		

Customer Acc No	Phoenix Beattle Contract Manager	Phoenix Beattle Reference	Date
H01	IJL	006330	05/23/2008

item No	Beattle Part Number / Description	Oty Ordered	Oty Sent	Qty To Follow
1	HP10CK3A-35-4F1 3" 10K 16C C&K HOSE x 35ft OAL CW 4.1/16" API SPEC FLANGE E/End 1: 4.1/16" 10Kpsi API Spec 6A Type 6BX Flange End 2: 4.1/16" 10Kpsi API Spec 6A Type 6BX Flange c/w BX155 Standard ring groove at each end Suitable for H2S Service Working pressure: 10,000psi Test pressure: 15,000psi Standard: API 16C Full specification Armor Guarding: Included Fire Rating: Not Included Temperature rating: -20 Deg C to +100 Deg C		1	0
2	SECK3-HPF3 LIFTING & SAFETY EQUIPMENT TO SUIT HP10CK3-35-F1 2 x 160mm ID Safety Clamps 2 x 244mm ID Lifting Collars & element C's 2 x 7ft Stainless Steel wire rope 3/4" OD 4 x 7.75t Shackles	1	1	
- ;	SC725-200CS SAFETY CLAMP 200MM 7.25T C/S GALVANISED	1	1	0

Continued...

All goods remain the property of Phoenix Beattie until paid for in full. Any damage or shortage on this delivery must be advised within 5 days. Returns may be subject to a handling charge.

Coflex Hose Certification



Fluid Technology

Quality Document

QUALI INSPECTION A	TY CONT		ATE	CERT.	No:	746	,
PURCHASER:	Phoenix Bea	ttie Co.		P.O. Nº		002491	
CONTITECH ORDER N°:	412638	HOSE TYPE:	3" ID	Ch	oke and l	(ill Hose	
HOSE SERIAL Nº:	52777	NOMINAL / ACT	UAL LENGTH:		10,67 m	1	
W.P. 68,96 MPa 1	0000 psi	T.P. 103,4	MPa 1500	() psi	Duration:	60 ~	min.
Pressure test with water at ambient temperature 10 mm = 10 mm = 25 MP		attachment.	(1 page)				•
		COUPL	INGS				
Туре		Serial Nº		Quality		Heat Nº	
3" coupling with	917	913	AIS	1 4130		T7998A	
4 1/16" Flange end			AIS	SI 4130	- A to Company	26984	
INFOCHIP INSTALL All metal parts are flawless				2000 ACA Deline & Mession & 2	Тє	API Spec 16 emperature ra	te:"B"
WE CERTIFY THAT THE ABOVE PRESSURE TESTED AS ABOVE	E HOSE HAS BE WITH SATISFA	en Manufactur Ctory Result.	RED IN ACCORE	ANCE W	ITH THE TE	RMS OF THE ORD	er and
04. April. 2008	Inspector		Quality Contro	Cont	iTech Rubb Instrial Kit Ly Control D	ent.	
			- Dag	<u> </u>	<u> </u>	Janen	···

- PHOENIX Beattie

Phoenix Beattle Corp

11635 Brittmoore Park Drive Houston, TX 77041 Tel: (832) 327-0141 Fax: (632) 327-0148 E-mail mail@phoenixbeattie.com

www.phoenixbeattle.com

Delivery Note

Customer Order Number	370-369-001	Delivery Note Number	003078	Page	2
Customer / Invoice Addres HELMERICH & PAYNE INT'L D 1437 SOUTH BOULDER TULSA, OK 74119		Delivery / Address HELMERICH & PAYNE IDC ATTN: JOE STEPHENSON - RI 13609 INDUSTRIAL ROAD HOUSTON, TX 77015	ig 370		

Customer Acc No	Phoenix Beattie Contract Manager	Phoenix Beattle Reference	Date
H01	JJL	006330	05/23/2008

item No	Beattle Part Number / Description	Qty Ordered	Qty Sent	Qty To Follow
4	SC725-132CS SAFETY CLAMP 132MM 7.25T C/S GALVANIZED C/W BOLTS	1	1	0
	OOCERT-HYDRO HYDROSTATIC PRESSURE TEST CERTIFICATE	1	1	0
6	OOCERT-LOAD LOAD TEST CERTIFICATES	1	. 1	0
	OOFREIGHT INBOUND / OUTBOUND FREIGHT PRE-PAY & ADD TO FINAL INVOICE NOTE: MATERIAL MUST BE ACCOMPANIED BY PAPERWORK INCLUDING THE PURCHASE ORDER, RIG NUMBER TO ENSURE PROPER PAYMENT	1	1	0
		A CONTRACTOR OF THE PARTY OF TH		

Phoenix Beattle Inspection Signature:

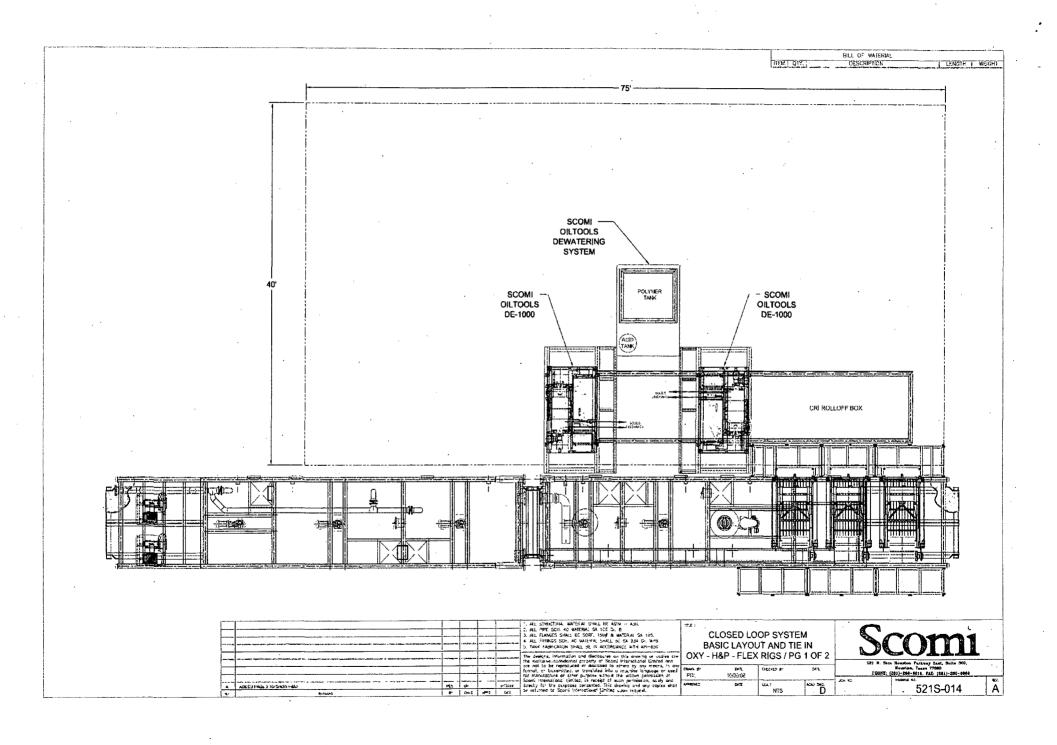
Received In Good Condition:

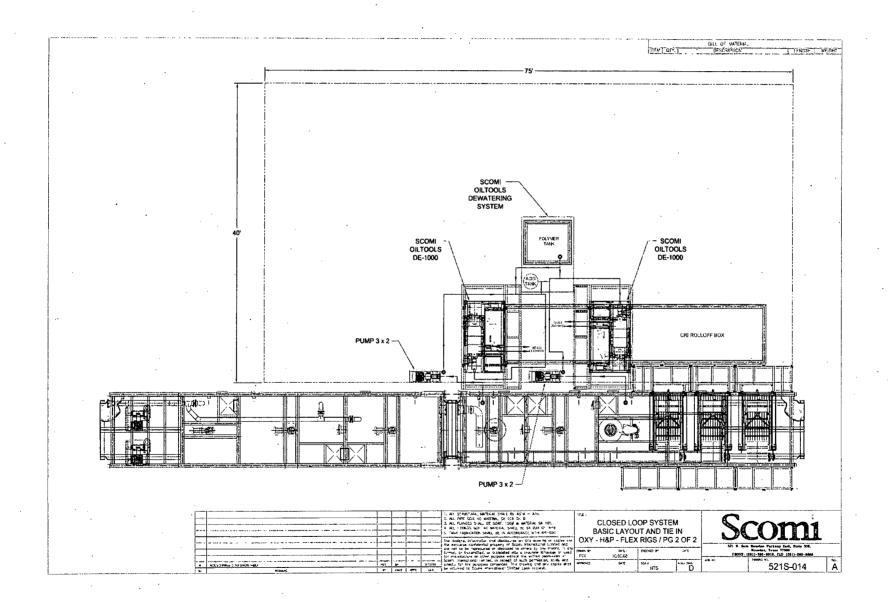
Signature

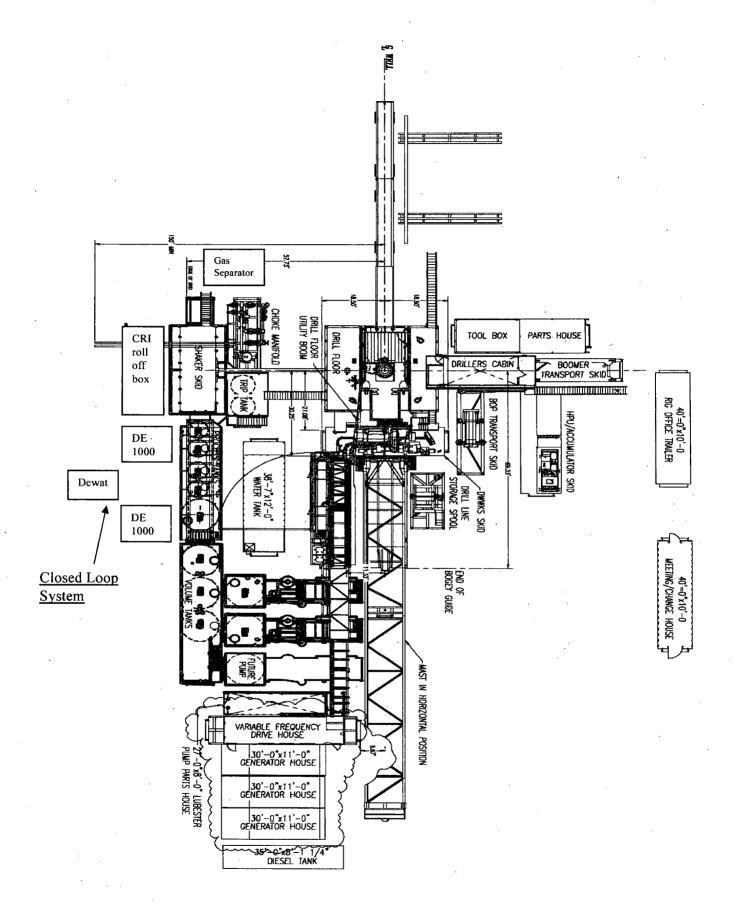
Print Name

Date

All goods remain the property of Phoenix Beattle until paid for in full. Any damage or shortage on this delivery must be edvised within 5 days. Returns may be subject to a handling charge.









Permian Drilling Hydrogen Sulfide Drilling Operations Plan New Mexico

Scope

This contingency plan establishes guidelines for the public, all company employees, and contract employees who's work activities may involve exposure to hydrogen sulfide (H2S) gas.

While drilling this well, it is possible to encounter H2S bearing formations. At all times, the first barrier to control H2S emissions will be the drilling fluid, which will have a density high enough to control influx.

Objective

- 1. Provide an immediate and predetermined response plan to any condition when H2S is detected. All H2S detections in excess of 10 parts per million (ppm) concentration are considered an Emergency.
- 2. Prevent any and all accidents, and prevent the uncontrolled release of hydrogen sulfide into the atmosphere.
- 3. Provide proper evacuation procedures to cope with emergencies.
- 4. Provide immediate and adequate medical attention should an injury occur.

Discussion

Implementation: This plan with all details is to be fully implemented

before drilling to commence.

Emergency response

Procedure:

This section outlines the conditions and denotes steps

to be taken in the event of an emergency.

Emergency equipment

Procedure:

This section outlines the safety and emergency

equipment that will be required for the drilling of this

well.

Training provisions: This section outlines the training provisions that must

be adhered to prior to drilling.

Drilling emergency call lists: Included are the telephone numbers of all persons to

be contacted should an emergency exist.

Briefing: This section deals with the briefing of all people

involved in the drilling operation.

Public safety: Public safety personnel will be made aware of any

potential evacuation and any additional support

needed.

Check lists: Status check lists and procedural check lists have been

included to insure adherence to the plan.

General information: A general information section has been included to

supply support information.

Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on the well:

- 1. The hazards and characteristics of H2S.
- 2. Proper use and maintenance of personal protective equipment and life support systems.
- 3. H2S detection.
- 4. Proper use of H2S detectors, alarms, warning systems, briefing areas, evacuation procedures and prevailing winds.
- 5. Proper techniques for first aid and rescue procedures.
- 6. Physical effects of hydrogen sulfide on the human body.
- 7. Toxicity of hydrogen sulfide and sulfur dioxide.
- 8. Use of SCBA and supplied air equipment.
- 9. First aid and artificial respiration.
- 10. Emergency rescue.

In addition, supervisory personnel will be trained in the following areas:

- 1. The effects of H2S on metal components. If high tensile strength tubular is to be used, personnel will be trained in their special maintenance requirements.
- 2. Corrective action and shut-in procedures when drilling a well, blowout prevention and well control procedures.
- 3. The contents and requirements of the H2S Drilling Operations Plan.

H2S training refresher must have been taken within one year prior to drilling the well. Specifics on the well to be drilled will be discussed during the pre-spud meeting. H2S and well control (choke) drills will be performed while drilling the well, at least on a weekly basis. This plan shall be available in the well site. All personnel will be required to carry the documentation proving that the H2S training has been taken.

Service company and visiting personnel

- A. Each service company that will be on this well will be notified if the zone contains H2S.
- B. Each service company must provide for the training and equipment of their employees before they arrive at the well site.
- C. Each service company will be expected to attend a well site briefing

Emergency Equipment Requirements

1. Well control equipment

The well shall have hydraulic BOP equipment for the anticipated pressures. Equipment is to be tested on installation and follow Oxy Well Control standard, as well as BLM Onshore Order #2.

Special control equipment:

- A. Hydraulic BOP equipment with remote control on ground.
- B. Rotating head
- C. Gas buster equipment shall be installed before drilling out of surface pipe.

2. Protective equipment for personnel

- A. Four (4) 30-minute positive pressure air packs (2 at each briefing area) on location.
- B. Adequate fire extinguishers shall be located at strategic locations.
- C. Radio / cell telephone communication will be available at the rig.
 - Rig floor and trailers.
 - Vehicle.

3. Hydrogen sulfide sensors and alarms

- A. H2S sensor with alarms will be located on the rig floor, at the bell nipple, and at the flow line. These monitors will be set to alarm at 10 ppm with strobe light, and audible alarm.
- B. Hand operated detectors with tubes.
- C. H2S monitor tester (to be provided by contract Safety Company.)
- D. There shall be one combustible gas detector on location at all times.

4. <u>Visual Warning Systems</u>

A. One sign located at each location entrance with the following language:

Caution – potential poison gas Hydrogen sulfide No admittance without authorization

Wind sock - wind streamers:

- A. One 36" (in length) wind sock located at protection center, at height visible from rig floor.
- B. One 36" (in length) wind sock located at height visible from pit areas.

Condition flags

A. One each condition flag to be displayed to denote conditions.

green – normal conditions yellow – potential danger red – danger, H2S present

B. Condition flag shall be posted at each location sign entrance.

5. Mud Program

The mud program is designed to minimize the risk of having H2S and other formation fluids at surface. Proper mud weight and safe drilling practices will be applied. H2S scavengers will be used to minimize the hazards while drilling. Below is a summary of the drilling program.

Mud inspection devices:

Garrett gas train or hatch tester for inspection of sulfide concentration in mud system.

6. Metallurgy

- A. Drill string, casing, tubing, wellhead, blowout preventers, drilling spools or adapters, kill lines, choke manifold, lines and valves shall be suitable for the H2S service.
- B. All the elastomers, packing, seals and ring gaskets shall be suitable for H2S service.

7. Well Testing

No drill stem test will be performed on this well.

8. Evacuation plan

Evacuation routes should be established prior to well spud for each well and discussed with all rig personnel.

9. <u>Designated area</u>

- A. Parking and visitor area: all vehicles are to be parked at a predetermined safe distance from the wellhead.
- B. There will be a designated smoking area.
- C. Two briefing areas on either side of the location at the maximum allowable distance from the well bore so they offset prevailing winds perpendicularly, or at a 45-degree angle if wind direction tends to shift in the area.

Emergency procedures

- A. In the event of any evidence of H2S level above 10 ppm, take the following steps:
 - 1. The Driller will pick up off bottom, shut down the pumps, slow down the pipe rotation.
 - 2. Secure and don escape breathing equipment, report to the upwind designated safe briefing / muster area.
 - 3. All personnel on location will be accounted for and emergency search should begin for any missing, the Buddy System will be implemented.
 - 4. Order non-essential personnel to leave the well site, order all essential personnel out of the danger zone and upwind to the nearest designated safe briefing / muster area.
 - 5. Entrance to the location will be secured to a higher level than our usual "Meet and Greet" requirement, and the proper condition flag will be displayed at the entrance to the location.
 - 6. Take steps to determine if the H2S level can be corrected or suppressed and, if so, proceed as required.

B. If uncontrollable conditions occur:

1. Take steps to protect and/or remove any public in the down-wind area from the rig – partial evacuation and isolation. Notify necessary public safety personnel and appropriate regulatory entities (i.e. BLM) of the situation.

- 2. Remove all personnel to the nearest upwind designated safe briefing / muster area or off location.
- 3. Notify public safety personnel of safe briefing / muster area.
- 4. An assigned crew member will blockade the entrance to the location. No unauthorized personnel will be allowed entry to the location.
- 5. Proceed with best plan (at the time) to regain control of the well. Maintain tight security and safety procedures.

C. Responsibility:

- 1. Designated personnel.
 - a. Shall be responsible for the total implementation of this plan.
 - b. Shall be in complete command during any emergency.
 - c. Shall designate a back-up.

All	personnel	١:

- 1. On alarm, don escape unit and report to the nearest upwind designated safe briefing / muster area upw
- 2. Check status of personnel (buddy system).
- 3. Secure breathing equipment.
- 4. Await orders from supervisor.

Drill site manager:

- 1. Don escape unit if necessary and report to nearest upwind designated safe briefing / muster area.
- 2. Coordinate preparations of individuals to return to point of release with tool pusher and driller (using the buddy system).
- 3. Determine H2S concentrations.
- 4. Assess situation and take control measures.

Tool pusher:

- 1. Don escape unit Report to up nearest upwind designated safe briefing / muster area.
- 2. Coordinate preparation of individuals to return to point of release with tool pusher drill site manager (using the buddy system).
- 3. Determine H2S concentration.
- 4. Assess situation and take control measures.

Driller:

1. Don escape unit, shut down pumps, continue rotating DP.

- 2. Check monitor for point of release.
- 3. Report to nearest upwind designated safe briefing / muster area.
- 4. Check status of personnel (in an attempt to rescue, use the buddy system).
- 5. Assigns least essential person to notify Drill Site Manager and tool pusher by quickest means in case of their absence.
- 6. Assumes the responsibilities of the Drill Site Manager and tool pusher until they arrive should they be absent.

Derrick man Floor man #1 Floor man #2 1. Will remain in briefing / muster area until instructed by supervisor.

Mud engineer:

- 1. Report to nearest upwind designated safe briefing / muster area.
- 2. When instructed, begin check of mud for ph and H2S level. (Garett gas train.)

Safety personnel:

1. Mask up and check status of all personnel and secure operations as instructed by drill site manager.

Taking a kick

When taking a kick during an H2S emergency, all personnel will follow standard Well control procedures after reporting to briefing area and masking up.

Open-hole logging

All unnecessary personnel off floor. Drill Site Manager and safety personnel should monitor condition, advise status and determine need for use of air equipment.

Running casing or plugging

Following the same "tripping" procedure as above. Drill Site Manager and safety personnel should determine if all personnel have access to protective equipment.

Ignition procedures

The decision to ignite the well is the responsibility of the operator (Oxy Drilling Management). The decision should be made only as a last resort and in a situation where it is clear that:

- 1. Human life and property are endangered.
- 2. There is no hope controlling the blowout under the prevailing conditions at the well.

Instructions for igniting the well

- 1. Two people are required for the actual igniting operation. They must wear self-contained breathing units and have a safety rope attached. One man (tool pusher or safety engineer) will check the atmosphere for explosive gases with the gas monitor. The other man is responsible for igniting the well.
- 2. Primary method to ignite: 25 mm flare gun with range of approximately 500 feet.
- 3. Ignite upwind and do not approach any closer than is warranted.
- 4. Select the ignition site best for protection, and which offers an easy escape route.
- 5. Before firing, check for presence of combustible gas.
- 6. After lighting, continue emergency action and procedure as before.
- 7. All unassigned personnel will remain in briefing area until instructed by supervisor or directed by the Drill Site Manager.

Remember: After well is ignited, burning hydrogen sulfide will convert to sulfur dioxide, which is also highly toxic. Do not assume the area is safe after the well is ignited.

Status check list

Note:	All items on t	this list mus	t be completed	before drilling	to production	casing point
-------	----------------	---------------	----------------	-----------------	---------------	--------------

- 1. H2S sign at location entrance.
- 2. Two (2) wind socks located as required.
- 3. Four (4) 30-minute positive pressure air packs (2 at each Briefing area) on location for all rig personnel and mud loggers.
- 4. Air packs inspected and ready for use.
- 5. Cascade system and hose line hook-up as needed.
- 6. Cascade system for refilling air bottles as needed.
- 7. Condition flag on location and ready for use.
- 8. H2S detection system hooked up and tested.
- 9. H2S alarm system hooked up and tested.
- 10. Hand operated H2S detector with tubes on location.
- 11. 1-100' length of nylon rope on location.
- 12. All rig crew and supervisors trained as required.
- 13. All outside service contractors advised of potential H2S hazard on well.
- 14. No smoking sign posted and a designated smoking area identified.
- 15. Calibration of all H2S equipment shall be noted on the IADC report.

The class described	Dut	
Checked by:	Date:	

Procedural check list during H2S events

Perform each tour:

- 1. Check fire extinguishers to see that they have the proper charge.
- 2. Check breathing equipment to ensure that it in proper working order.
- 3. Make sure all the H2S detection system is operative.

Perform each week:

- 1. Check each piece of breathing equipment to make sure that demand or forced air regulator is working. This requires that the bottle be opened and the mask assembly be put on tight enough so that when you inhale, you receive air or feel air flow.
- 2. BOP skills (well control drills).
- 3. Check supply pressure on BOP accumulator stand by source.
- 4. Check breathing equipment mask assembly to see that straps are loosened and turned back, ready to put on.
- 5. Check pressure on breathing equipment air bottles to make sure they are charged to full volume. (Air quality checked for proper air grade "D" before bringing to location)
- 6. Confirm pressure on all supply air bottles.
- 7. Perform breathing equipment drills with on-site personnel.
- 8. Check the following supplies for availability.
 - A. Emergency telephone list.
 - B. Hand operated H2S detectors and tubes.

General evacuation plan

- 1. When the company approved supervisor (Drill Site Manager, consultant, rig pusher, or driller) determines the H2S gas cannot be limited to the well location and the public will be involved, he will activate the evacuation plan.
- 2. Drill Site Manager or designee will notify local government agency that a hazardous condition exists and evacuation needs to be implemented.
- 3. Company or contractor safety personnel that have been trained in the use of H2S detection equipment and self-contained breathing equipment will monitor H2S concentrations, wind directions, and area of exposure. They will delineate the outer perimeter of the hazardous gas area. Extension to the evacuation area will be determined from information gathered.
- 4. Law enforcement personnel (state police, police dept., fire dept., and sheriff's dept.) Will be called to aid in setting up and maintaining road blocks. Also, they will aid in evacuation of the public if necessary.
- 5. After the discharge of gas has been controlled, company safety personnel will determine when the area is safe for re-entry.

Important: Law enforcement personnel will not be asked to come into a contaminated area. Their assistance will be limited to uncontaminated areas. Constant radio contact will be maintained with them.

Emergency actions

Well blowout - if emergency

- 1. Evacuate all personnel to "Safe Briefing / Muster Areas" or off location if needed.
- 2. If sour gas evacuate rig personnel.
- 3. If sour gas evacuate public within 3000 ft radius of exposure.
- 4. Don SCBA and shut well in if possible using the buddy system.
- 5. Notify Drilling Superintendent and call 911 for emergency help (fire dept and ambulance) if needed.
- 6. Implement the Blowout Contingency Plan, and Drilling Emergency Action Plan.
- 6. Give first aid as needed.

Person down location/facility

- 1. If immediately possible, contact 911. Give location and wait for confirmation.
- 2. Don SCBA and perform rescue operation using buddy system.

Toxic effects of hydrogen sulfide

Hydrogen sulfide is extremely toxic. The acceptable ceiling concentration for eight-hour exposure is 10 ppm, which is .001% by volume. Hydrogen sulfide is heavier than air (specific gravity – 1.192) and colorless. It forms an explosive mixture with air between 4.3 and 46.0 percent by volume. Hydrogen sulfide is almost as toxic as hydrogen cyanide and is between five and six times more toxic than carbon monoxide. Toxicity data for hydrogen sulfide and various other gases are compared in table i. Physical effects at various hydrogen sulfide exposure levels are shown in table ii.

Table i Toxicity of various gases

Common name	Chemical formula	Specific gravity	Threshold limit	Hazardous limit	Lethal concentration (3)
		(sc=1)	(1)	(2)	` _
Hydrogen Cyanide	Hen	0.94	10 ppm	150 ppm/hr	300 ppm
Hydrogen Sulfide	H2S	1.18	10 ppm	250 ppm/hr	600 ppm
Sulfur Dioxide	So2	2.21	5 ppm	-	1000 ppm
Chlorine	Cl2	2.45	1 ppm	4 ppm/hr	1000 ppm
Carbon Monoxide	Co	0.97	50 ppm	400 ppm/hr	1000 ppm
Carbon Dioxide	Co2	1.52	5000 ppm	5%	10%
Methane	Ch4	0.55	90,000 ppm	Combustibl	e above 5% in air

- 1) threshold limit concentration at which it is believed that all workers may be repeatedly exposed day after day without adverse effects.
- 2) hazardous limit concentration that will cause death with short-term exposure.
- 3) lethal concentration concentration that will cause death with short-term exposure.

Toxic effects of hydrogen sulfide

Table ii Physical effects of hydrogen sulfide

•		Concentration	Physical effects
Percent (%)	<u>Ppm</u>	Grains	
		100 std. Ft3*	·
0.001	<10	00.65	Obvious and unpleasant odor.

0.002	10	01.30	Safe for 8 hours of exposure.
0.010	100	06.48	Kill smell in $3 - 15$ minutes. May sting eyes and throat.
0.020	200	12.96	Kills smell shortly; stings eyes and throat.
0.050	500	32.96	Dizziness; breathing ceases in a few minutes; needs prompt artificial respiration.
0.070	700	45.36	Unconscious quickly; death will result if not rescued promptly.
0.100	1000	64.30	Unconscious at once; followed by death within minutes.

^{*}at 15.00 psia and 60'f.

Use of self-contained breathing equipment (SCBA)

- 1. Written procedures shall be prepared covering safe use of SCBA's in dangerous atmosphere, which might be encountered in normal operations or in emergencies. Personnel shall be familiar with these procedures and the available SCBA.
- 2 SCBA's shall be inspected frequently at random to insure that they are properly used, cleaned, and maintained.
- 3. Anyone who may use the SCBA's shall be trained in how to insure proper facepiece to face seal. They shall wear SCBA's in normal air and then wear them in a
 test atmosphere. (note: such items as facial hair {beard or sideburns} and
 eyeglasses will not allow proper seal.) Anyone that may be reasonably expected
 to wear SCBA's should have these items removed before entering a toxic
 atmosphere. A special mask must be obtained for anyone who must wear
 eyeglasses or contact lenses.
- 4. Maintenance and care of SCBA's:
 - a. A program for maintenance and care of SCBA's shall include the following:
 - 1. Inspection for defects, including leak checks.
 - 2. Cleaning and disinfecting.
 - 3. Repair.
 - 4. Storage.
 - b. Inspection, self-contained breathing apparatus for emergency use shall be inspected monthly.
 - 1. Fully charged cylinders.
 - 2. Regulator and warning device operation.
 - 3. Condition of face piece and connections.
 - 4. Rubber parts shall be maintained to keep them pliable and prevent deterioration.
 - c. Routinely used SCBA's shall be collected, cleaned and disinfected as frequently as necessary to insure proper protection is provided.
- 5. Persons assigned tasks that requires use of self-contained breathing equipment shall be certified physically fit (medically cleared) for breathing equipment usage at least annually.
- 6. SCBA's should be worn when:
 - A. Any employee works near the top or on top of any tank unless test reveals less than 10 ppm of H2S.

- B. When breaking out any line where H2S can reasonably be expected.
- C. When sampling air in areas to determine if toxic concentrations of H2S exists.
- D. When working in areas where over 10 ppm H2S has been detected.
- E. At any time there is a doubt as to the H2S level in the area to be entered.

Rescue First aid for H2S poisoning

Do not panic!

Remain calm - think!

- 1. Don SCBA breathing equipment.
- 2. Remove victim(s) utilizing buddy system to fresh air as quickly as possible. (go up-wind from source or at right angle to the wind. Not down wind.)
- 3. Briefly apply chest pressure arm lift method of artificial respiration to clean the victim's lungs and to avoid inhaling any toxic gas directly from the victim's lungs.
- 4. Provide for prompt transportation to the hospital, and continue giving artificial respiration if needed.
- 5. Hospital(s) or medical facilities need to be informed, before-hand, of the possibility of H2S gas poisoning no matter how remote the possibility is.
- 6. Notify emergency room personnel that the victim(s) has been exposed to H2S gas.

Besides basic first aid, everyone on location should have a good working knowledge of artificial respiration.

Revised CM 6/27/2012

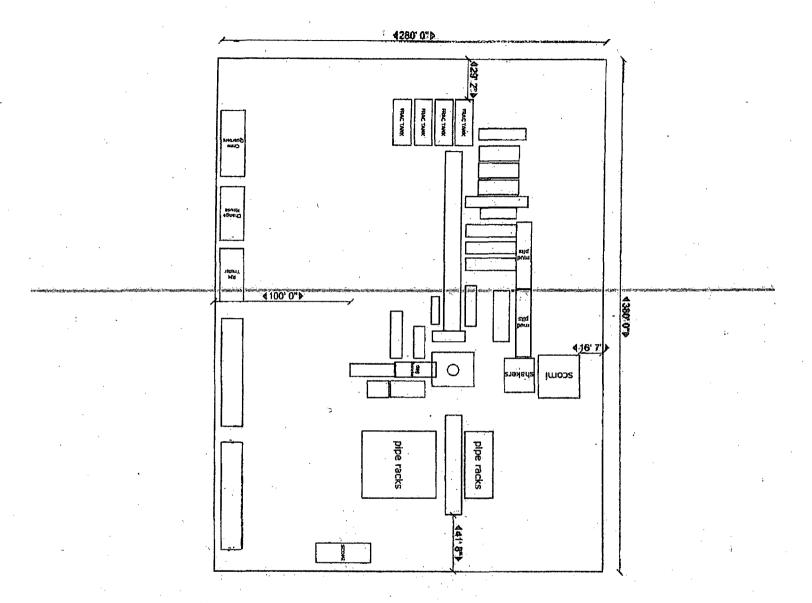


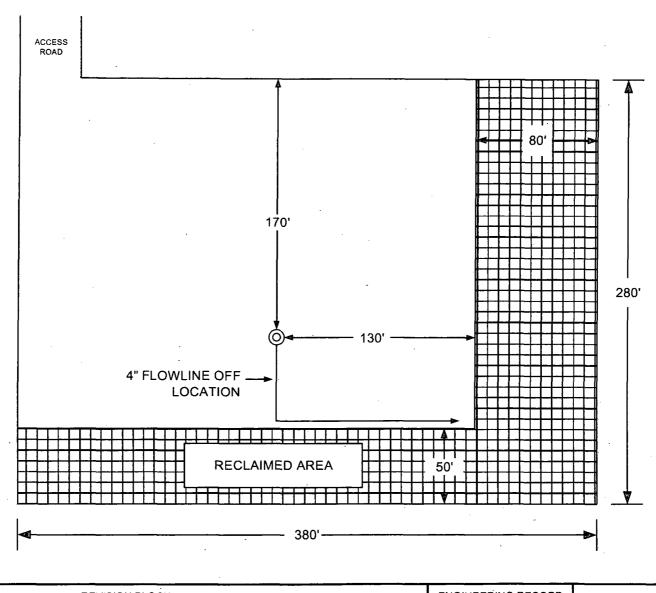
Permian Drilling Hydrogen Sulfide Drilling Operations Plan Nimitz 12 Federal #3H

Open drill site. No homes or buildings are near the proposed location.

1. Escape

Personnel shall escape upwind of wellbore in the event of an emergency gas release. Escape can take place through the lease road on the Northwest side of the location. Personnel need to move to a safe distance and block the entrance to location.





		REVISION BLOCK				ENGINEERIN	NG RECORD	1
NO.	DATE	DESCRIPTION_	BY	снк	APP	BY	DATE	1
1	7/24/12	PRELIMINARY DRAFT	JMR			DRN: JMR	7/24/12	1.
						DES:		1
						СНК:	•	1
						APP:	· · · · · · · · · · · · · · · · · · ·	1
						AFE:		1

PRODUCTION FACILITY LAYOUT NIMITZ 12 FED #3H

EDDY COUNTY, NEW MEXICO

PECOS DISTRICT CONDITIONS OF APPROVAL

· · · · · · · · · · · · · · · · · · ·	
OPERATOR'S NAME:	OXY USA INC
LEASE NO.:	NM82896
WELL NAME & NO.:	3H-NIMITZ 12 FEDERAL
SURFACE HOLE FOOTAGE:	330'/N. & 2010'/E.
BOTTOM HOLE FOOTAGE	330'/S. & 2010'/E.
LOCATION:	Section 12, T. 24 S., R. 30 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

	General Provisions
	Permit Expiration
	Archaeology, Paleontology, and Historical Sites
	Noxious Weeds
\boxtimes	Special Requirements
	Pipeline ROW
	Construction
	Notification
	Topsoil
	Closed Loop System
	Federal Mineral Material Pits
	Well Pads
	Roads
	Road Section Diagram
\boxtimes	Drilling
	Secretary's Potash
	Medium Cave Potential
	Waste Material and Fluids
	Logging Requirements
	Production (Post Drilling)
	Well Structures & Facilities
	Pipelines
	Electric Lines
	Interim Reclamation
	Final Abandonment & Reclamation