

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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

JUN 22 2011

Form C-102

Revised October 12, 2005

RECEIVED

Submit to Appropriate District Office

State Lease- 4 Copies

Fee Lease- 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-40171	Pool Code 1964496403	Pool Name Wildcat Diamond Tail Bone Springs
Property Code 38675	Property Name SIR ALEX FERGUSON STATE	Well Number 1
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3636.7'

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	4	23 SOUTH	32 EAST, N.M.P.M.		1980'	NORTH	990'	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40		Joint or Infill N	Consolidation Code	Order No.					

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

				<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>David Stewart</i> 6/20/11 Signature Date</p> <p>David Stewart Printed Name</p>	
<p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was located from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>15079 Date of Survey JUNE 14, 2011</p> <p><i>Terry J. Paul</i> 6/16/2011 Signature of Professional Surveyor Certificate Number</p> <p>15079</p> <p>WO# 110614WL-b (KA)</p>				<p>JUN 28 2011</p>	

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(505) 393-6161 Fax:(505) 393-0720

District II

1301 W. Grand Ave., Artesia, NM 88210
Phone:(505) 748-1283 Fax:(505) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources

Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-102
Permit 133422

HOBBS OCD**JUN 22 2011****RECEIVED****WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-025-40171	2. Pool Code 47644 96403	3. Pool Name Wildcat DIAMOND TAIL; BONE SPRING
4. Property Code 38675	5. Property Name SIR ALEX FERGUSON STATE	
6. Well No 001		
7. OGRID No. 16696	8. Operator Name OXY USA INC	9. Elevation 3637

10. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
H	4	23S	32E		1980	N	990	E	LEA

11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated Acres 40.00		13. Joint or Infill		14. Consolidation Code		15. Order No.			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION	
	<p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p>	
	<p>E-Signed By: KAREN M SINARD Title: Date: 6/21/2011</p>	
	SURVEYOR CERTIFICATION	
<p><i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i></p>		
<p>Surveyed By: Terry Asel Date of Survey: 6/14/2011 Certificate Number: 15079</p>		

Operator Name/Number: OXY USA Inc. 16696
 Lease Name/Number: Sir Alex Ferguson State #1 VB-0976-2
 Pool Name/Number: Diamondtail Bone Spring 17644
 Surface Location: 1980 FNL 990 FEL (H) Sec 4 T23S R32E

C-102 Plats: 6/14/11 6/16/11 Proposed TD: 9000' TVD

SAFS-1

SL - Lat: 32.3353029 Long: 103.6738027 X=703705.4 Y=486326.3 NAD-1927 Elevation: 3636.7'

Casing Program:

Hole Size	Interval	OD Csg	Weight	Collar	Grade	Condition	Collapse Design Factor	Burst Design Factor	Tension Design Factor
14-3/4"	800'	11-3/4"	42#	ST&C	H40	New	4.04	3.93	
10-5/8"	4700'	8-5/8"	32#	LT&C	J55	New	2.00	2.62	
7-7/8"	9000'	5-1/2"	17#	LT&C	J55	New	1.19	1.36	
DVT @ 6000' & 4750'									

Collapse and burst loads calculated using Stress Check with anticipated loads

Cement Program

- 11-3/4" Surface Circulate cement to surface w/ + 290sx PP cmt w/ 4% Bentonite + .25#/sx Poly-E-Flake + 2% CaCl₂, 13.5ppg, 1.75 yield, 689# 24hr CS, 150% Excess followed by 300sx PP cmt w/ 2% CaCl₂, 14.8ppg, 1.35 yield, 2500#-24hr CS, 150% Excess
- 8-5/8" Intermediate Circulate cement to surface w/ 1080sx HES light PP cmt w/ 5% Salt + .125#/sx Poly-E-Flake + 5#/sx Gilsonite + 0.5% Halad-344 + 1% CaCl₂, 12.9ppg, 1.87 yield, 851# 24hr CS, 150% Excess followed by 200sx PP cmt w/ 1% WellLife 734, 14.8ppg, 1.34 yield, 1343#-24hr CS, 150% Excess
- 5-1/2" Production Cement 1st stage w/ 650sx Super H cmt w/ .5% Halad-344 + .4% CFR-3 + 5#/sx Gilsonite + 1#/sx salt + .3% HR-800 + .125#/sx Poly-E-Flake, 13.2ppg, 1.62 yield, 981# 24 CS, 100% Excess, Calc TOC-5995'
 Cement 2nd stage w/ 410sx Super H cmt w/ 1#/sx Salt + .125#/sx Poly-E-Flake + 5#/sx Gilsonite + 0.4% CFR-3 + 0.5% HR-344, 13.2ppg, 1.61 yield, 1536# 24hr CS, 200% Excess, Calc TOC-4745'
 Cement 3rd stage w/ 460sx HES Light PP cmt w/ 3#/sx Salt, 12.4ppg, 2.08 yield, 560# 24CS, 35% Excess followed by 150sx PP cmt w/ .125#/sx Poly-E-Flake + 5#/sx Gilsonite, 14.8ppg, 1.33 yield, 1750# 24CS, 35% Excess, Circ Surface

Proposed Mud Circulation System

Depth	Mud Wt. ppq	Visc sec	Fluid Loss	Type System
0 - 800'	8.4-8.8	32-38	NC	Fresh Water/Spud Mud
800 - 4700'	10	28-29	NC	Brine Water
4700 - 5500'	8.5-9.0	28-29	NC	Fresh Water
7600 - TD'	9.0	32-38	<10	LSND

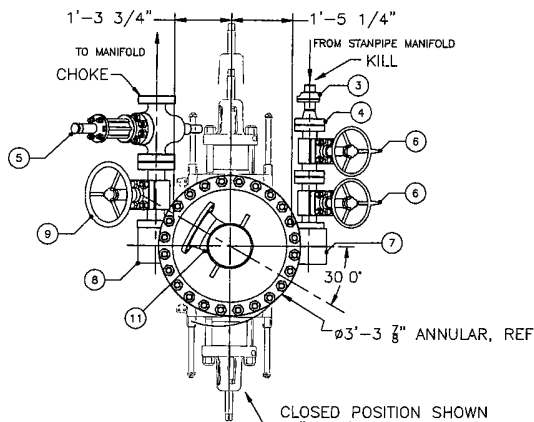
Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times.

BOP Program:

Surface None
 Production 11" X 5M Double Ram, 11" X 3M Annular, 5M Choke Manifold

Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:

Geological Marker	Depth
a. Anhydrite	800'
b. Bottom Salt	4700'
c. Yates-7R-Queen	4800'
d. Delaware	4700'
e. Bone Spring	8700'



PROPER TORQUE FOR BOLTS

COMPONENT	FLANGE SIZE & RATING	BOLT SIZE	TORQUE	
			CF=0.07	CF=0.13
SPOOLS, ANNULAR & RAMS	11"x5M	1 7/8" DIA	1890	3330
BLOCKS	3 1/8x5M	1 1/8" DIA	401	686
CHOKES VALVES	3 1/8x5M	1 1/8" DIA	401	686
KILL VALVES	2 1/16x5M	7/8" DIA	188	319

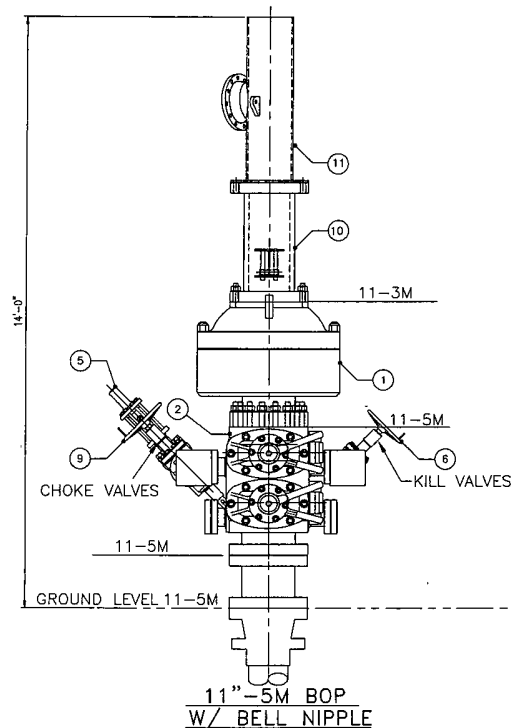
BILL OF MATERIAL

ITEM NO.	QUAN	DESCRIPTION	PART NUMBER	WEIGHT
		11"-5M BOP ASSEMBLY		
1	1	ANNULAR, 11x3M BOLTED TYPE		6005
2	1	BOP DOUBLE RAM		7600
4		RAM ELEMENTS		444
3	1	HAMMER UNION, 2-1502# XXH (BW)		5
4	1	FLANGE, WN 2 1/16-5M API		42
5	1	VALVE, GATE FLS-HCR 3 1/8-5M		396
6	2	VALVE, GATE 2 1/16-5M		350
7	1	90° STUDDED BLOCK, 3 1/8-5M X 2 1/16-5M		240
8	1	90° STUDDED BLOCK, 3 1/8-5M X 3 1/8-5M		250
9	2	VALVE, GATE 3 1/8-5M		720
10	1	BELL NIPPLE BOP LIFTING SECTION	WK. F4M-H-318.01A	780
11	1	BELL NIPPLE EXTENSION	WK. F4M-H-318.01A	396
12	1	11"-5M x 11"-5M x 1'-3" LONG SPACER		600
		SPOOL- WORKING PRESSURE 5000 PSI		

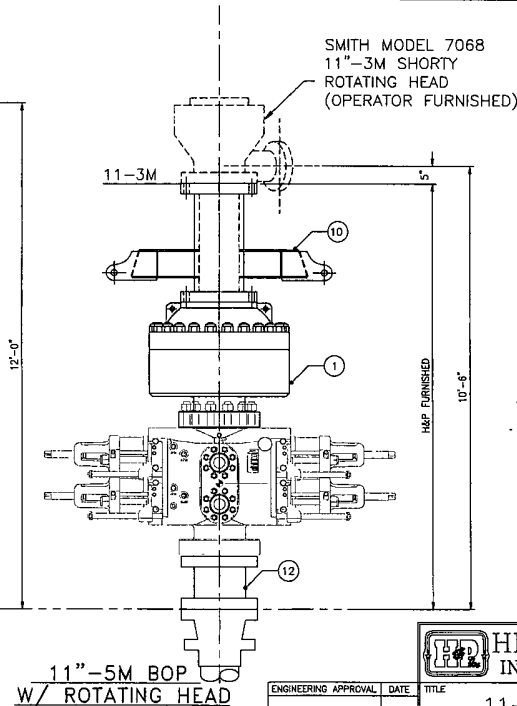
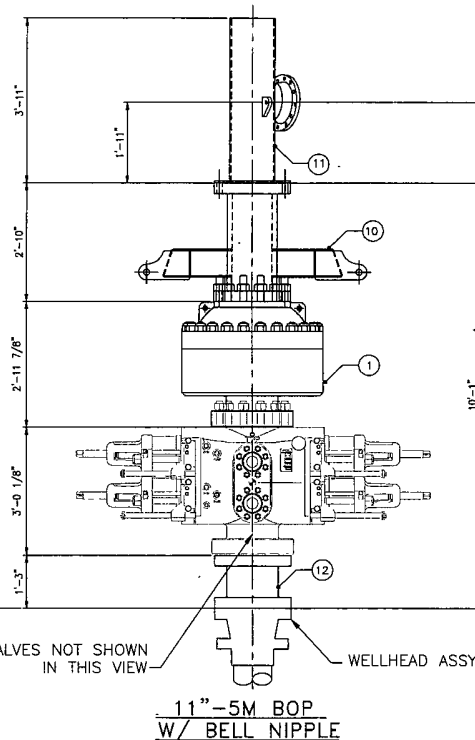
HARDWARE

ITEM NO.	QUAN	DESCRIPTION	PART NUMBER	WEIGHT
		RINGS AND BOLTS		400

APPROX TOTAL WEIGHT = 18,228 LBS.



H&P FURNISHED
UNLESS NOTED
OPERATOR FURNISHED



ISSUED FOR
FABRICATION
August-08-2008
DRAFTSMAN
ENGINEER

PROPRIETARY
THIS DRAWING AND THE IDEAS AND INFORMATION INCLUDED
IN THIS DRAWING ARE PROPRIETARY AND ARE NOT TO BE
REPRODUCED, DISTRIBUTED OR DISCLOSED IN ANY MANNER
WITHOUT THE PRIOR, WRITTEN CONSENT OF A DULY AUTHORIZED
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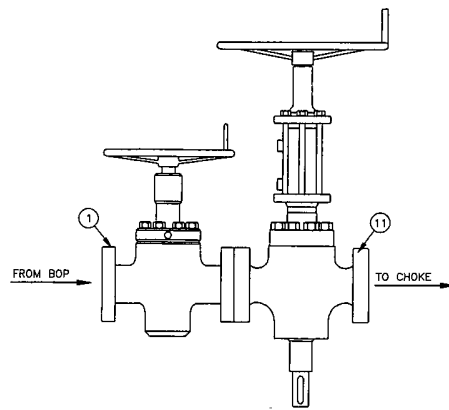
NOTES:
1 ALL BOP RAMS SHOWN ARE SHAFFER MODEL LXT
11-5M PSI WP - FLANGED BOTTOM AND STUDDED TOP

ENGINEERING APPROVAL		DATE	TITLE
△			11"-5M BOP EQUIPMENT GENERAL ARRANGEMENT
△			CUSTOMER OXY-PERMIAN
△			PROJECT F4M
△	08/08/08	ADDED 1 OF 4 SHITS WAS 1 OF 3	DRJ
△	07/29/08	SHEET 1 OF 3 WAS 1 OF 5	DRJ
			DRAWN DJOHNSON DATE 07/14/08 DWG NO F4M-H-320 R

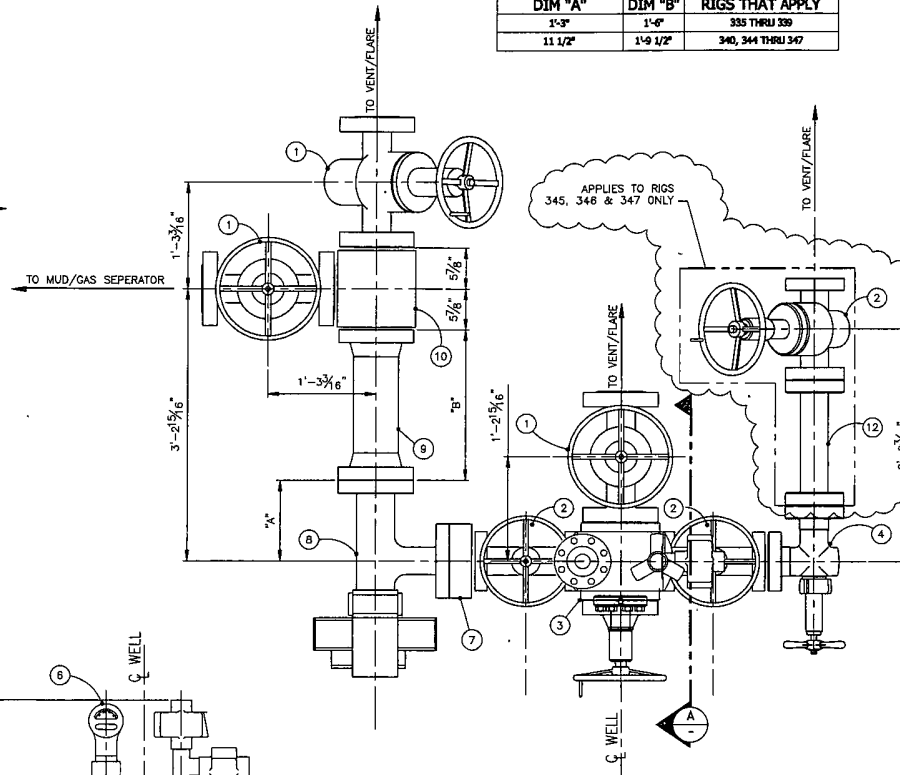
LEGEND

- ①—3 1/8"–5M FLANGED END GATE VALVE
- ②—2 1/16"–5M FLANGED END GATE VALVE
- ③—BLOCK WITH TRANSMITTER FLANGE AND PRESSURE GAUGE
- ④—2 1/16"–5M ADJUSTABLE CHOKE
- ⑤—TRANSMITTER FLANGE
- ⑥—PRESSURE GAUGE
- ⑦—DSA 2 1/16"–5M x 3 1/16"–10M
- ⑧—3 1/16"–10M HYDRAULIC CHOKE
- ⑨—3 1/8"–5M x 3 1/16"–10M SPOOL
- ⑩—3 1/8"–5M x 3 1/8"–5M STUDDED TEE
- ⑪—3 1/8"–5M FLANGED END HCR GATE VALVE
- ⑫—2 1/16"–5M x 2 1/16"–5M SPOOL

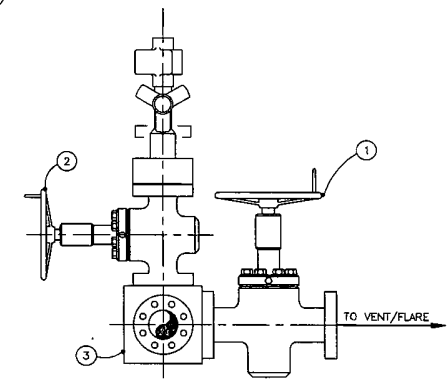
DIMENSION NOTATION		
DIM "A"	DIM "B"	RIGS THAT APPLY
1'-3"	1'-0"	333 THRU 339
11 1/2"	1'-0 1/2"	340, 344 THRU 347



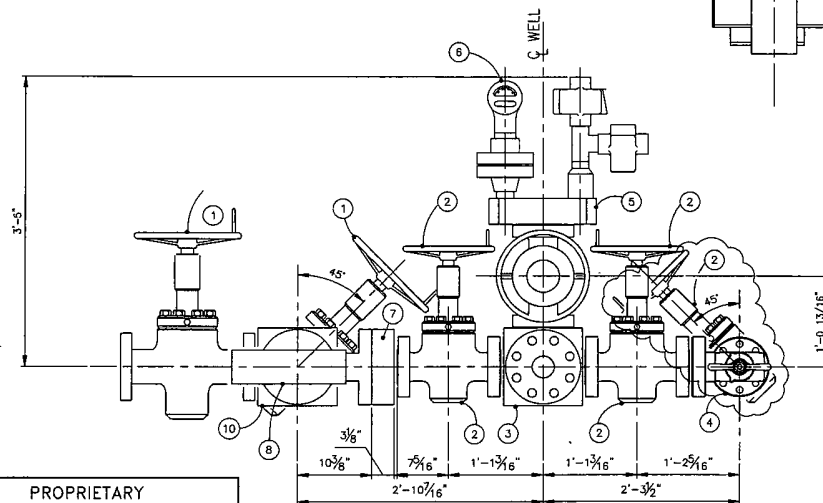
BOP SIDE OUTLET VALVES



PLAN VIEW
CHOKE MANIFOLD



VIEW A-A



ELEVATION VIEW

PROPRIETARY

THIS DRAWING AND THE IDEAS AND INFORMATION INCLUDED IN THIS DRAWING ARE PROPRIETARY AND ARE NOT TO BE REPRODUCED, DISTRIBUTED OR DISCLOSED IN ANY MANNER WITHOUT THE PRIOR, WRITTEN CONSENT OF A DULY AUTHORIZED OFFICER OF HELMERICH & PAYNE INT'L DRILLING CO.

ISSUED FOR FABRICATION
October-17-2008
DRAFTSMAN
ENGINEER

ENGINEERING APPROVAL		DATE	TITLE
			CHOKE MANIFOLD DETAIL ARRANGEMENT
			CUSTOMER OXY SOUTH AMERICA
			PROJECT F4M
			DRAWN JAV
			DATE 01/07/08
			CHW NO
			REV