Form 3160-5 (September 2001)

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0135 Expires January 31, 2004

5. Lease Serial No.

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NM	022	253	59	

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter ar
abandoned well. Use Form 3160-3 (APD) for such proposal

Do not use this form for proposals to dri abandoned well. Use Form 3160-3 (APD) t	6. If Indian, Allottee or Tribe Name	
SUBMIT IN TRIPLICATE - Other instruction	7. If Unit or CA/Agreement, Name and/or No	
1. Type of Well Oil Well X Gas Well Other 2. Name of Operator Kerr-McGee 0il & Gas Onshore LLC	8. Well Name and No. Federal 28-4	
3a. Address 16666 NORTHCHASE HOUSTON, TX 77060 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1725 FNL & 1750 FEL SEC 28 T21-S R23-E UNIT LE	30-015-33402 10. Field and Pool, or Exploratory Area Indian Basin Upper Penn 11. County or Parish, State Eddy	
12. CHECK APPROPRIATE BOX(ES) TO IN	NDICATE NATURE OF NOTICE, REP	
Notice of Intent X Subsequent Report Final Abandonment Notice Acidize Alter Casing Casing Repair Change Plans Convert to Inject	Fracture Treat Reclamation New Construction Recomplet Plug and Abandon Temporari	X Other Spud Spud Sp
13. Describe Proposed or Completed Operation (clearly state all pertinent de If the proposal is to deepen directionally or recomplete horizontally, give Attach the Bond under which the work will be performed or provide the following completion of the involved operations. If the operation results testing has been completed. Final Abandonment Notices shall be filed determined that the final site is ready for final inspection.)	e subsurface locations and measured and true ver se Bond No. on file with BLM/BIA. Required s s in a multiple completion or recompletion in a r	rtical depths of all pertinent markers and zones subsequent reports shall be filed within 30 days new interval, a Form 3160-4 shall be filed once

The purpose of this Sundry notice is to report that drilling activity commenced for the Federal 28-4 on May 8, 2004.

A detailed report of this operation is attached.

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) Rod L. Bajiley	Title MANAGER OF REGULATORY	
A Maley	Date 7/26/04	
THIS SPACE FOR FEDERA	AL OR STATE OFFICE USE	
Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warran certify that the applicant holds legal or equitable title to those rights in the subject which would entitle the applicant to conduct operations thereon.	nt or Office	

Title 18 U.S.C. Section 1001, and Title 43 U.S.C. Section 1212, makes 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.

Operations Summary Report

Legal Well Name: FEDERAL 28 #4
Common Well Name: FEDERAL 28 #4

Contractor Name:

Event Name:

DRILLING

PATTERSON DRILLING CO.

Start: Rig Release: 05/26/2004

05/04/2004

Spud Date: 05/07/2004 End:

05/27/2004

Printed: 07/22/2004 1:44:15 PM

Group:

Rig Name:

PATTERSON

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
05/08/2004	06:00 - 13:00	7.00	01		DRLSUR	SURVEY, STAKE, ARC SURVEY, AND BUILD LOCATION ON THE FEDERAL 28 LEASE IN EDDY COUNT, NEW MEXICO AT 1725' FNL & 1750' FEL IN SEC 28; T21S; R23E / ABBOT BROS DRILL STARTING HOLE & SET 40' OF 16" CONDUCTOR PIPE / MIRU PATTERSON-UTI DRILLING COMPANY RIG #503 & OMNI-AIR DRILLING / MAKE PRE-SPUD RIG INSPECTION / HOLD PRE-SPUD SAFETY MEETING / GET ALL AIR TO FLUID CONNECTIONS MADE UP AND TESTED / KDB-GND 17.50' / SPUD WELL @ 1300 HRS ON 05-07-2004 / CALLED AND NOTIFIED JIM AMOS WITH THE BLM BY HIS VOICE MESSAGE SYSTEM OF OUR INTENT TO SPUD ON 05-06-2004 @ 1605 HOURS / CALLED AND NOTIFIED JIM AMOS WITH THE BLM AGAIN ON 05-07-2004 @ 1000 HRS OF OUR INTENT TO SPUD WELL AND LEFT MESSAGE ON HIS VOICE MESSAGE SYSTEM
	13:00 - 06:00	17.00	02	A	DRLSUR	DRILLING 12 1/4" HOLE F-58' T-170' / 112' / ROP 6.5 FPH / WOB 40K-/ / RPM 90 / AIR MIST 3400 CFM / PSI 200 ****NO ACCIDENTS OR POLLUTION REPORTED LAST 24 HOURS**** RIG FUEL ON HAND: 6,878 GALS RIG FUEL USED: 369 GALS RIG FUEL RECEIVED: 5,695 GALS OMNI-AIR FUEL ON HAND: 3,500 GALS OMNI-AIR FUEL USED: 720 GALS
05/09/2004	06:00 - 22:00	16.00	02	A	DRLSUR	DRILLING 12 1/4" HOLE F-170' T-544' / ' / ROP 23.3 FPH / WOB 87K / RPM 70 / AIR MIST @ 3400CFM / PSI 220 / MAKING WATER TO RESERVE PIT
	22:00 - 22:30 22:30 - 06:00	0.50 7.50		A	DRLSUR DRLSUR	DEVIATION SURVEY @ 498' - 1/2 DEGREE DRILLING F-544' T-760' / 216' / ROP 28.5 FPH / RPM 70 / AIR MIST @ 3400 CFM / PSI 220 / MAKING WATER TO RESERVE PIT ****NO ACCIDENTS OR POLLUTION REPORTED LAST 24 HOURS**** RIG FUEL ON HAND: 6,485 GALS RIG FUEL USED: 393 GALS OMNI AIR FUEL ON HAND: 2,800 GALS OMNI AIR FUEL USED: 700 GALS
05/10/2004	06:00 - 11:00	5.00		A	PROD	DRILLING 12 1/4" HOLE F-760' T-927' / 167' / ROP 33.4 FPH / RPM 70 / AIR MIST @ 3400 CFM / PSI 300
	11:00 - 11:30 11:30 - 15:30	0.50 4.00	02	А	PROD PROD	CHANGE OUT ROTATING HEAD ELEMENT DRILLING F-927' T-1,020' / 93' / ROP 23.3 FPH / RPM 70 / AIR MIST @ 3400 CFM / PSI 300
	15:30 - 16:00 16:00 - 02:00	0.50 10.00	I	A	PROD PROD	DEVIATION SURVEY @ 978' - 1 DEGREE DRILLING F-1,020' T-1,330' / 310' / ROP 31 FPH / RPM 70 / AIR MIST @ 3400 CFM / PSI 300 / TD SURFACE HOLE @ 0200HRS MDT (0300HRS CDT) 05-10-2004
	02:00 - 03:30 03:30 - 05:00 05:00 - 06:00	1.50 1.50 1.00	06	A H	PROD PROD PROD	CLEAN HOLE WITH AIR MIST TRIP OUT OF HOLE TO 8" DRILL COLLARS RIG UP LAYDOWN MACHINE TO LAYDOWN DRILL COLLARS AND PICK UP 9 5/8" CASING @ REPORT TIME ****NO ACCIDENTS OR POLLUTION REPORTED LAST 24 HOURS**** RIG FUEL ON HAND: 6,179 GALS RIG FUEL USED: 306 GALS OMNI-AIR FUEL ON HAND: 1,800 GALS

Operations Summary Report

Legal Well Name: FEDERAL 28 #4
Common Well Name: FEDERAL 28 #4

05/04/2004 Start:

Spud Date: 05/07/2004

Event Name:

DRILLING

Rig Release: 05/26/2004

End: 05/27/2004

Contractor Name:

PATTERSON DRILLING CO.

Group:

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PATTERSON

Rig Number: 503

	T			Sub		D '. U
Date	From - To	Hours	Code	Code	Phase	Description of Operations
05/10/2004	05:00 - 06:00	1.00			PROD	OMNI-AIR FUEL USED: 1,000 GALS
05/11/2004	06:00 - 07:30	1.50	1	H	DRLSUR	FINISH LAYING DOWN 8" DRILL COLLARS
	07:30 - 08:00	0.50		В	DRLSUR	RIG UP BULL ROGERS CASING CREW / HOLD SAFETY MEETING ON RUNNING CASING
	08:00 - 10:30	2.50	12	Α	DRLSUR	RAN 31 JTS 9 5/8" 36#-FT J-55 STC CASING / CS 1,325' / FC 1,275' / RIG UP BJ CEMENTING HEAD
	10:30 - 12:00	1.50	12	С	DRLSUR	BJ SERVICES CEMENTED 9 5/8" CASING WITH 1ST LEAD 180 SX "H"+10% A-10-B THIX+1% CACL2+10#-SK LCM-1+0.25#-SK CELLO FLAKE, 2ND LEAD 425 SX 35:65:6 BJ LITE+2% CACL2+5#-SK LCM-1+0.25#-SK CELLO FLAKE TIW 200 SX "C" +2%
						CACL2+0.25#-SK CELLO FLAKE / FP 625 - 1400 PSI / PD @ 1200 HRS 05-10-2004 / HELD PRESSURE 5 MIN / RELEASED PRESSURE / FLOAT HELD OK / CIRCULATED 210 BBLS CEMENT TO PIT / ALL CASING RUNNING AND CEMENTING WAS WITNESSED BY BLM REPRESENTATIVE PAUL SWARTZ
	12:00 - 16:00	4.00	13	}	DRLSUR	WAIT ON CEMENT
	16:00 - 22:00	6.00	14		DRLSUR	CUT OFF 16" CONDUCTOR PIPE / MAKE ROUGH CUT ON 9 5/8" CASING / CUT OFF ROTATING HEAD FROM 16" CONDUCTOR / MAKE FINAL CUT ON 9 5/8" CASING / WELD ON AND TEST 9 5/8" X 11 3M "A" SECTION / TEST TO 1,000 PSI / HELD OK
	22:00 - 06:00	8.00	14		DRLSUR	NIPPLE UP BOPE & CHOKE MANIFOLD / TEST PIPE RAMS 250 LOW-3,000 HIGH / BLIND RAMS 250 LOW-3,000 HIGH / HYDRIL 250 LOW-1,500 HIGH / CHOKE MANIFOLD 250 LOW-3,000 HIGH / TESTING FLOOR VALVES @ REPORT TIME ****NO ACCIDENTS OR POLLUTION REPORTED LAST 24
05/12/2004	06:00 - 09:00	3.00	15		DRLPRO	HOURS**** FUEL ON HAND: 5,969 GALS FUEL USED: 210 GALS FINISH TESTING BOPE & RIG DOWN TESTERS / INSTALL FLOWLINE / GROUT IN SURFACE CASING WITH READY MIX
	09:00 - 13:00	4.00	06	D	DRLPRO	CEMENT PICK UP AND MAKE UP PACKED HOLE ASSEMBLY / TRIP IN HOLE WITH PACKED HOLE ASSEMBLY, DRILL COLLARS, AND JARS TO 1,012'
	13:00 - 14:00	1.00	09	{	DRLPRO	CUT AND SLIP 125' DRILLING LINE
	14:00 - 17:00	3.00	25		DRLPRO	FINISH TRIP IN HOLE / TAG AND DRILL OUT CEMENT F-1,265' T-1,274' / DRILL OUT WIPER PLUG AND FLOAT COLLAR F-1,274'
	17:00 - 17:30	0.50	25		DRLPRO	T-1,276' / DRILL OUT 1/2 OF SHOE JOINT TEST 9 5/8" CASING TO 1,000 PSI / HELD OK
	17:30 - 18:00	0.50	1		DRLPRO	FINISH DRILLING OUT SHOE JOINT
	18:00 - 22:00	4.00		A	DRLPRO	DRILLING 8 3/4" HOLE F-1,330' T-1,432' / 102' / ROP 25.5 FPH / WOB 65K / RPM 65 / SPM 60 / GPM 310 / PMP 1250
	22:00 - 22:30	0.50	10	1	DRLPRO	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	22:30 - 06:00	7.50		A	DRLPRO	
						HOURS**** FUEL ON HAND: 5,542 GALS FUEL USED: 427 GALS
05/13/2004	06:00 - 11:30	5.50	02	Α	DRLPRO	DRILLING 8 3/4" HOLE F-1,680' T-1,908' / 228' / ROP 41.4 FPH / WOE 65K / RPM 65 / SPM 60 / GPM 310 / PMP 1250
	11:30 - 12:00	0.50	10	i .	DRLPRO	DEVIATION CUDVEY & 4 0071 AM DECREE
ſ	12:00 - 01:00	13.00		l	DRLPRO	DEVIATION SURVEY @ 1,867' - 1/4 DEGREE DRILLING F-1,908' T-2,381' / 473' / ROP 36.3 FPH / WOB 65K / RPM

Operations Summary Report

Legal Well Name: FEDERAL 28 #4
Common Well Name: FEDERAL 28 #4

Start:

05/04/2004

Spud Date: 05/07/2004

Event Name:

DRILLING

Rig Release: 05/26/2004

End: Group: 05/27/2004

Contractor Name: Rig Name:

PATTERSON DRILLING CO. **PATTERSON**

05/13/2004	ns
01:30 - 06:00	
SPM 60 / GPM 310 / PMP 1250 G58 GALS FUEL USED: G58 GALS FUEL USED: G58 GALS FUEL USED: G58 GALS FUEL USED: G58 GALS G5/14/2004 G5/14/2004 G5/15/2004 G5/15	
****NO ACCIDENTS OR POLLUTION REPORTED HOURS***** FUEL ON HAND: 4,884 GALS FUEL USED: 658 GALS DRILLING 8 3/4" HOLE F-2,507' T-2,856' / 349' / F 65K / RPM 65 / SPM 60 / GPM 310 / PMP 1250 16:30 - 17:00	WOB 65K / RPM 65
HOURS**** FUEL ON HAND: 4,884 GALS FUEL USED: 658 GALS 05/14/2004 06:00 - 16:30 10.50 02 A DRLPRO DRLING 8 3/4" HOLE F-2,507' T-2,856' / 349' / F 65K / RPM 65 / SPM 60 / GPM 310 / PMP 1250 DEVIATION SURVEY @ 2,814' - 3/4 DEGREE DRILLING F-2,856' T-3,260' / 404' / ROP 31.1 FPI 65 / SPM 60 / GPM 310 / PMP 1250 DRLPRO DRILLING 8 3/4" HOLE F-3,260' T-3,330' / 70' / RI 65K / RPM 65 / SPM 60 / GPM 310 / PMP 1250 DRLPRO DRILLING 8 3/4" HOLE F-3,260' T-3,330' / 70' / RI 65K / RPM 65 / SPM 60 / GPM 310 / PMP 1250 DRLPRO DRILLING 8 3/4" HOLE F-3,260' T-3,330' / 70' / RI 65K / RPM 65 / SPM 60 / GPM 310 / PMP 1250 DRLPRO DRLPRO DRLPRO DRLPRO DRLPRO DRLPRO DRILLING F-3,330' T-3,771' / 441' / ROP 28.4 FPI 65 / SPM 60 / GPM 310 / PMP 1250 DRLPRO DRLPRO DRLPRO DRLPRO DRLPRO DRLLING F-3,330' T-3,771' A41' / ROP 28.4 FPI 65 / SPM 60 / GPM 310 / PMP 1250 DRLPRO DEVIATION SURVEY @ 3,731' - 3/4 DEGREE DRILLING F-3,771' T-3,890' / 119' / ROP 23.8 FPI 65 / SPM 60 / GPM 310 / PMP 1250 DRLPRO DRLPRO	
FUEL ON HAND: 4,884 GALS FUEL USED: 658 GALS FUEL USED: 670 GALS FUEL USED: 656 / SPM 60 / GPM 310 / PMP 1250 FUEL USED: 656 / SPM 60 / GPM 310 / PMP 1250 FUEL USED: 658 / SPM 60 / GPM 310 / PMP 1250 FUEL USED: 658 / SPM 60 / GPM 310 / PMP 1250 FUEL USED: 658 / SPM 60 / GPM 310 / PMP 1250 FUEL USED: 658 / SPM 60 / GPM 310 / PMP 1250 FUEL USED: 658 / SPM 60 / GPM 310 / PMP 1250 FUEL USED: 668 GALS FUEL USED: 668 G	LAST 24
DRLPRO DRLPRO DRLLING 8 3/4" HOLE F-2,507' T-2,856' / 349' / F	
05/14/2004	
05/14/2004	
16:30 - 17:00	ROP 33.2 FPH / WOB
17:00 - 06:00	
17:00 - 06:00	
65 / SPM 60 / GPM 310 / PMP 1250 ****NO ACCIDENTS OR POLLUTION REPORTED HOURS**** FUEL ON HAND: 4,214 GALS FUEL USED: 670 GALS 05/15/2004 06:00 - 08:00 2.00 02 A DRLPRO DRILLING 8 3/4" HOLE F-3,260' T-3,330' / 70' / Re 65K / RPM 65 / SPM 60 / GPM 310 / PMP 1250 RAN 2 DEVIATION SURVEYS @ 3,293' / FIRST: MISRUN / SECOND SURVEY WAS 1 DEGREE 09:00 - 00:30 15.50 02 A DRLPRO DRILLING F-3,330' T-3,771' / 441' / ROP 28.4 FPE 65 / SPM 60 / GPM 310 / PMP 1250 DRILLING F-3,771' T-3,890' / 119' / ROP 23.8 FPE 65 / SPM 60 / GPM 310 / PMP 1250 DRLPRO DRILLING F-3,771' T-3,890' / 119' / ROP 23.8 FPE 65 / SPM 60 / GPM 310 / PMP 1250 ****NO ACCIDENTS OR POLLUTION REPORTED HOURS**** FUEL ON HAND: 3,546 GALS FUEL USED: 668 GALS FUEL USED: 668 GALS FUEL USED: 668 GALS FUEL USED: 668 GALS FUEL USED: 668 GALS	1 / WOB 65K / RPM
****NO ACCIDENTS OR POLLUTION REPORTED HOURS**** FUEL ON HAND: 4,214 GALS FUEL USED: 670 GALS DRILLING 8 3/4" HOLE F-3,260' T-3,330' / 70' / R0 65K / RPM 65 / SPM 60 / GPM 310 / PMP 1250 08:00 - 09:00	., ., ., ., ., .,
HOURS**** FUEL ON HAND: 4,214 GALS FUEL USED: 670 GALS	LAST 24
05/15/2004 06:00 - 08:00 2.00 02 A DRLPRO DRLLING F-3,330' T-3,771' / 441' / ROP 28.4 FPI 65 / SPM 60 / GPM 310 / PMP 1250 DRLPRO DRLPRO DRLPRO DRLLING F-3,330' T-3,771' / 441' / ROP 28.4 FPI 65 / SPM 60 / GPM 310 / PMP 1250 DRLPRO DRLPRO DRLLING F-3,771' T-3,890' / 119' / ROP 23.8 FPI 65 / SPM 60 / GPM 310 / PMP 1250 T-4,277' / 387' / FI DRLPRO DRLLING F-3,771' DRLPRO DRLPRO DRLLING F-3,771' DRLPRO DRLPR	
05/15/2004 06:00 - 08:00 2.00 02 A DRLPRO DRLPRO DRLLING 8 3/4" HOLE F-3,260' T-3,330' / 70' / R0 65K / RPM 65 / SPM 60 / GPM 310 / PMP 1250 RAN 2 DEVIATION SURVEYS @ 3,293' / FIRST SMISRUN / SECOND SURVEY WAS 1 DEGREE O9:00 - 00:30 15.50 02 A DRLPRO DRILLING F-3,330' T-3,771' / 441' / ROP 28.4 FPM 65 / SPM 60 / GPM 310 / PMP 1250 DRLPRO DEVIATION SURVEY @ 3,731' - 3/4 DEGREE O7:00 - 06:00 5.00 02 A DRLPRO DRILLING F-3,771' T-3,890' / 119' / ROP 23.8 FPM 65 / SPM 60 / GPM 310 / PMP 1250 DRLPRO DRILLING F-3,771' T-3,890' / 119' / ROP 23.8 FPM 65 / SPM 60 / GPM 310 / PMP 1250 PM 60 / GPM 310 / PMP 1250 PM 60 / GPM 310 / PMP 1250 PM 60 /	
05/15/2004	
08:00 - 09:00	7D 35 EDH / M/OB
08:00 - 09:00	JE 33 FEIT WOB
09:00 - 00:30	SHDVEN IMAG A
09:00 - 00:30	JOHNET WAS A
00:30 - 01:00	H / MOD SEK / DDM
00:30 - 01:00	IT WOD OOK I KHINI
01:00 - 06:00 5.00 02 A DRLPRO DRILLING F-3,771' T-3,890' / 119' / ROP 23.8 FPE 65 / SPM 60 / GPM 310 / PMP 1250 ****NO ACCIDENTS OR POLLUTION REPORTED HOURS**** FUEL ON HAND: 3,546 GALS FUEL USED: 668 GALS O5/16/2004 06:00 - 20:30 14.50 02 A PROD DRILLING 8 3/4" HOLE F-3,890' T-4,277' / 387' / F	
65 / SPM 60 / GPM 310 / PMP 1250 ****NO ACCIDENTS OR POLLUTION REPORTED HOURS**** FUEL ON HAND: 3,546 GALS FUEL USED: 668 GALS 05/16/2004 06:00 - 20:30 14.50 02 A PROD DRILLING 8 3/4" HOLE F-3,890' T-4,277' / 387' / F	T TANOD SEK I DOM
****NO ACCIDENTS OR POLLUTION REPORTED HOURS**** FUEL ON HAND: 3,546 GALS FUEL USED: 668 GALS 05/16/2004 06:00 - 20:30 14.50 02 A PROD DRILLING 8 3/4" HOLE F-3,890' T-4,277' / 387' / F	II WOO OOK I KEWI
HOURS**** FUEL ON HAND: 3,546 GALS FUEL USED: 668 GALS 05/16/2004 06:00 - 20:30 14.50 02 A PROD DRILLING 8 3/4" HOLE F-3,890' T-4,277' / 387' / F	3 L A C T 24
FUEL ON HAND: 3,546 GALS FUEL USED: 668 GALS 05/16/2004 06:00 - 20:30 14.50 02 A PROD DRILLING 8 3/4" HOLE F-3,890' T-4,277' / 387' / F) LAST 24
05/16/2004 06:00 - 20:30 14.50 02 A PROD FUEL USED: 668 GALS DRILLING 8 3/4" HOLE F-3,890' T-4,277' / 387' / F	
05/16/2004 06:00 - 20:30 14.50 02 A PROD DRILLING 8 3/4" HOLE F-3,890' T-4,277' / 387' / F	
	OD 26 6 EDH (MOD .
65K / RPM 65 / SPM 60 / GPM 310 / PMP 1300	OF 20.0 FFN / WOB
20:30 - 21:00	
21:00 - 06:00 9.00 02 A PROD DRILLING F-4,277' T-4,495' / 218' / ROP 24.2 FPI	L/MOD CELV / DDM
65 / SPM 60 / GPM 310 / PMP 1300	17 WOD OOK / RPIVI
****NO ACCIDENTS OR POLLUTION REPORTE) ACT 24
HOURS****	J LAG (24
FUEL ON HAND: 2,731 GALS	
FUEL USED: 815 GALS	
05/17/2004 06:00 - 06:30 0.50 02 A INT1 DRLG FROM 4495' TO 4529' 34' IN 0.5 HRS =	COULID
WOB 65 ROTARY 65 SPP 1300 310 GPM	00/IIK
	00.04111.10
	22.917HR
WOB 55 ROTARY 65 SPP 1300 324 GPM	
18:00 - 18:30	40.01/11/0
18:30 - 06:00 11.50 02 A INT1 DRLG FROM 4781' TO 4990' 209' IN 11.5 HRS	≥ 18.27HR
WOB 55 ROTARY 65 SPP 1300 324 GPM	
PROGRESS 495' IN 23 HRS = 21.5'/HR OVERAL	LPR
NO ACCIDENTS OR POLLUTION REPORTED	
FUEL ON HAND 1845 GAL	
USED 826 GALS	
05/18/2004 06:00 - 06:30 0.50 10 INT1 SURVEY AT 4888' 2.25 DEG.	
06:30 - 17:30 11.00 02 A INT1 DRLD FROM 4990' TO 5255' 265' IN 11 HRS =	24.1'/HR PR

Operations Summary Report

Legal Well Name:

FEDERAL 28 #4

Common Well Name:

FEDERAL 28 #4

DRILLING

PATTERSON

Start:

05/04/2004

Spud Date: 05/07/2004 End: 05/27/2004

Group:

Event Name: Contractor Name: Rig Name:

PATTERSON DRILLING CO.

Rig Release: 05/26/2004

Rig Number: 503	Rig	Ν	lum	ber:	503
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Rig Name.		ATTEN	 -	COL		Nig Number: 505
Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
05/18/2004	06:30 - 17:30 17:30 - 02:30	11.00 9.00		A I	INT1 INT1	WOB 48K ROTARY 65 SPP 1320 320 GPM TAKING WL SURVEY AND BROKE WL / DROPPED TOOL TO BTM TOH TO RECOVER TOOL AND CHECK BIT/ 4 BUTTONS MISSING.
						WORN MU RR BIT #3 SMITH F37HY #MT5680 JETTED 3/12 (BIT HAD 56 PREVIOUS HOURS RUN)
	02:30 - 06:00	3.50	02	A	INT1	TIH AND WASH 40' TO BTM (10' FILL) DRLG FROM 5255' TO 5320' 65' IN 3.5 HRS = 18.6'/HR PR WOB 50K ROTARY 65 SPP 1320 320 GPM
		} 				PROGRESS 330' IN 14.5 HRS = 22.8'/HR OVERALL PR NO ACCIDENTS OR POLLUTION REPORTED FUEL ON HAND 7421
					}	USED 789 GALS
05/19/2004	06:00 - 07:30	1.50	†	A	INT1	DRLD FROM 5320' TO 5382' 62' IN 1.5 HRS = 41'/HR PR WOB 50 ROTARY 65 SPP 1300 320 GPM
	07:30 - 08:00	0.50			INT1	SURVEY AT 5341' 1.75 DEG.
	08:00 - 17:00	9.00	}	Α	INT1	DRLD FROM 5382' TO 5572' 190' IN 9 HRS = 21.1'/HR PR WOB 50 ROTARY 65 SPP 1300 320 GPM
	17:00 - 17:30 17:30 - 02:30	0.50 9.00	1		INT1	SURVEY AT 5530'
ļ	17.30 - 02:30	9.00	02	Α	INTT	WOB 50 ROTARY 65 SPP 1300 320 GPM
	02:30 - 03:00	0.50	10		INT1	SURVEY AT 5720' 1.5 DEG.
	03:00 - 06:00	3.00	1	A	INT1	DRLD FROM 5762' TO 5800' 38' IN 3 HRS = 12.6'/HR PR WOB 50K ROTARY 65 SPP 1300 320 GPM
						BGG 60 CONN GAS 120 MAX GAS 200
						50% SILT & 50% LIME
				}		PROGRESS 480' IN 22.5 HRS = 21.3'/HR OVERALL PR
}	}			1		NO ACCIDENTS OR POLLUTION REPORTED
				1		FUEL ON HAND 6683 GALS
05/20/2004	06:00 - 10:30	4.50	02	^	INT1	USED 738 GALS
05/20/2004	00.00 - 10.30	4.50	02	Α	INT	DRLD FROM 5800' TO 5920' 120' IN 4.5 HRS = 26.6'/HR PR 50K WOB ROTARY 65 SPP 1300 320 GPM
	10:30 - 11:00	0.50	10		INT1	SURVEY AT 5879' 2.0 DEG
}	11:00 - 19:00	8.00		Α	INT1	DRLD FROM 5920' TO 6109' 189' IN 8 HRS = 23.6'/HR PR
l					Ì	WOB 50K ROTARY 65 SPP 1300 320 GPM
]	19:00 - 19:30	0.50			INT1	SURVEY AT 6065' 1.25 DEG.
l	19:30 - 02:30	7.00	02	Α	INT1	DRLD FROM 6109' TO 6298' 189' IN 7 HRS = 27'/HR PR
	03:30 03:00	0.50	10	,	INITA	WOB 50K ROTARY 65 SPP 1300 320 GPM
ļ	02:30 - 03:00 03:00 - 06:00	0.50 3.00	1	Α	INT1	SURVEY AT 6256' 1.5 DEG.
l	03.00 - 08.00	3.00	02	^	INT	DRLD FROM 6298' TO 6350' 52' IN 3 HRS = 17.3'/HR PR WOB 50K ROTARY 65 SPP 1300 320 GPM
ļ						BGG 60 CONN GAS 130 MAX GAS 260
ł			ļ	ĺ		PROGRESS 550' IN 22.5 HRS = 24.4'/HR OVERALL PR
				į.		NO ACCIDENTS OR POLLUTION REPORTED
					-	FUEL ON HAND 6074 GALS
						USED 609 GALS
05/21/2004	06:00 - 10:30	4.50	02	Α	INT1	DRLD FROM 6350' TO 6489' 139' IN 4.5 HRS = 30.9'/HR PR
f						WOB 50K ROTARY 65 SPP 1300 320 GPM
	10:30 - 11:00	0.50			INT1	SURVEY AT 6449' 1.25 DEG.
}	11:00 - 17:00	6.00	02	A	INT1	DRLD FROM 6489' TO 6646' 157' IN 6 HRS = 26.2'/HR PR
1	17:00 17:00	0.50	10		INITA	WOB 50 ROTARY 65 SPP 1300 320 GPM
1	17:00 - 17:30	0.50	10	}	INT1	SURVEY AT 6603' 1.75 DEG
					}	
						

Operations Summary Report

Legal Well Name:

FEDERAL 28 #4

Common Well Name:

FEDERAL 28 #4

05/04/2004

Spud Date: 05/07/2004

Event Name:

DRILLING

Start:

End:

05/27/2004

Contractor Name:

PATTERSON DRILLING CO.

Rig Release: 05/26/2004

Group:

Rig Name:

PATTERSON

Ria Number: 503

Sub From - To Phase Description of Operations Date Hours Code Code INT1 05/21/2004 17:30 - 20:00 Α DRLD FROM 6646' TO 6700' 54' IN 2.5 HRS = 21.6'/HR PR 2.50 02 WOB 50K ROTARY 65 SPP 1300 320 GPM 20:00 - 01:30 5.50 06 D INT1 TOH / CHECK RR BIT #3 OK / LD PACKED HOLE ASSEMBLY INT1 01:30 - 06:00 TIH WITH RR BIT #3, BIT SUB, 26 EA. 6" DC, DRLG JARS, 4 EA. 4.50 06 n 6"DC BREAKING CIRC ON BTM AT 6700' AT REPORT TIME PROGRESS 350' IN 13 HRS = 26.9'/HR OVERALL PR NO ACCIDENTS OR POLLUTION REPORTED FUEL ON HAND 5650 GALS **USED 424 GALS** BREAK CIRC ON BTM WITH NO PROBLEMS / NO LOSSES 05/22/2004 06:00 - 06:30 0.50 06 D INT₁ SERVICE RIG 06:30 - 18:00 11.50 02 Α INT1 DRLD FROM 6700' TO 6992' 292' IN 11.5 HRS = 25.4'/HR PR WOB 50K ROTARY 65 SPP 1300 320 GPM 18:00 - 18:30 INT1 0.50 10 SURVEY AT 6930' 3.75 DEG. 18:30 - 00:30 INT1 6.00 02 Α DRLD FROM 6990' TO 7129' 139' IN 6 HRS = 23'/HR PR 45 - 30K WOB ROTARY 65 SPP 1300 320 GPM 00:30 - 01:00 0.50 10 INT1 SURVEY AT 7080' 6.25 DEG 01:00 - 04:30 INT1 DRLD FROM 7129' TO 7161' 32' IN 3.5 HRS = 9.1'/HR PR 3.50 02 Α WOB 20K ROTARY 65 SPP 1300 320 GPM 04:30 - 05:00 INT1 0.50 08 WORK ON PUMPS 05:00 - 06:00 1.00 02 INT1 DRLD FROM 7161' TO 7174' HIT VOID/ LOST PUMP PRESSURE / LOST RETURNS 5 MIN GAS AT SURFACE / SHUT WELL IN RIGGING UP ROTATING HEAD RUBBER AT REPORT TIME PROGRESS 474' IN 22 HRS = 21.5'/HR OVERALL PR NO ACCIDENTS OR POLLUTION REPORTED **FUEL ON HAND 4772 GALS USED 878 GALS** BUILDING MUD VOLUMN / MIXING 36 VIS AND 15#/BBL MAGNA 05/23/2004 06:00 - 10:30 INT₁ 4.50 05 Α FIBER SWEEP IN SYSTEM. ATTEMPTING TO FILL HOLE INT1 10:30 - 14:00 3.50 02 ATTEMTING TO DRILL FROM 7174' TO 7194' / TITE AND LOSING Α HOLE EVERY TIME PICK UP ABOVE VOID AT 7172' -7178' PUMPED AWAY ALL MUD WITH NO RETURNS. PU ABOVE VOID AND BUILD MUD VOLUMN AND MIXING -PUMPING 80 BBL 36 VIS 50#/BBL MAGNA FIBER LCM SWEEP 14:00 - 20:00 6.00 05 Α INT1 MIX AND PUMP 80 BBLS OF 36 VIS + 50#/BBL MAGNA FIBER + 25#/BBL CEDAR FIBER PMPING AT 50 SPM AND 0 PSI SPP MIX AND PUMP 2ND 80 BBLS OF 36 VIS + 50#/BBL MAGNA FIBER + 25#/BBL CEDAR FIBER PMPING AT 50 SPM AND 0 PSI SPP AND NO RETURNS 20:00 - 06:00 10.00 02 Α INT1 DRLD FROM 7194' TO 7265' 71' IN 10 HRS = 7.1'/HR PR CONTROL DRLG WITH PARTIAL RETURNS (0 - 15 % RETURNS) DRLG 15' AND REAMING SAME 15" IN STAGES WOB 25 -30K ROTARY 60 SPP 500 - 1200 PSI 55 SPM PUMPING 40 BBL HI VIS 50#/BBL MAGNAFIBER + 15#/BBL CEDAR **FIBER SWEEPS** EVERY HR.

Operations Summary Report

Legal Well Name:

FEDERAL 28 #4

Common Well Name: FEDERAL 28 #4

Event Name:

DRILLING

Start:

05/04/2004

Spud Date: 05/07/2004

End:

05/27/2004

Contractor Name:

PATTERSON DRILLING CO.

Rig Release: 05/26/2004

Group:

Rig Name:

PATTERSON

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
05/23/2004	20:00 - 06:00	10.00	02	A	INT1	BGG 220 CONN GAS 330 MAX GAS 600 NO ACCIDENTS OR POLLUTION REPORTED PROGRESS 91' IN 12 HRS FUEL ON HAND 4326 GALS USED 446 GALS
05/24/2004	06:00 - 18:30	12.50	02	A	INT1	CONTROL DRILLING FROM 7265' TO 7423' 158' IN 12.5 HRS = 12.6'/HR PR WOB 30K ROTARY 65 SPP 1100 320 GPM WITH PARTIAL TO 25%
						RETURNS TAKING 30 - 45 MIN TO REGAIN CIRC AFTER EACH CONNECTION LOST COMPLETE RETURNS AT 7423' / TITE CONNECTION HAD TO REAM
	18:30 - 23:30	5.00	02	A	INT1	BACK 20' TO BTM. DRLD FROM 7423' TO 7446' 23' IN 2 HRS = 11.5'/HR PR TORQ HIGH AND STILL NO RETURNS / TITE PICKING UP AND COULD NOT MAKE CONNECTION / PUMPING 45 VIS 50#/BBL MAGNA FIBER+ 25#/BBL
						COTTONSEED HULLS SWEEPS / REGAINED PARTIAL -20% RETURNS AFTER 3 HRS / REAMED FROM 7419' - 7446' SEVERAL TIMES AND STILL COULD LOWER KELLY WITHOUT ROTATING AND PMPING/ CONTINUE REAMING 7423' - 7446' UNTIL ABLE TO MAKE SAFE
	23:30 - 06:00	6.50	02	A	INT1	CONNECTION. DRLD FROM 7446' TO 7515' 69' IN 6.5 HRS = 10.6'/HR PR WOB 15-30K ROTARY 65 SPP 1000 285 GPM (PMPIMG SLOW TO HELP HEAL HOLE AND CONSERVE WATER) 15% RETURNS TO NO RETURNS PROGRESS 250' IN 19 HRS = 13.2'/HR OVERALL PR BGG 150 CONN GAS 330 MAX GAS 400 NO ACCIDENTS OR [POLLUTION REPORTED FUEL ON HAND 3657 GALS
05/25/2004	06:00 - 08:30	2.50	02	A	INT1	USED 669 GALS DRLD FROM 7515' TO 7541' 26' IN 2.5 HRS = 10.4'/HR PR WOB 30K ROTARY 65 SPP 1300 320 GPM PARTIAL TO 30% RETURNS
	08:30 - 09:00 09:00 - 03:00	0.50 18.00		C A	INT1 INT1	REAMING TITE HOLE FROM 7515' TO 7541' DRLD FROM 7541' TO 7800' 259' IN 18 HRS = 14.4'/HR PR WOB 40K ROTARY 65 SPP 1300 - 1700 (PLUGGED JET) 320 GPM PARTIAL TO 50% RETURNS PROGRESS 285' IN 20.5 HRS = 14'/HR OVERALL PR
	03:00 - 05:00	2.00	05	A	INT1	TD WELL AT 7800' AT 0:300 AM (5-25-04) PUMP 80 BBLS HI-VIS/LCM PILL AROUND MIX AND SPOT 80 BBLS HI-VIS/LCM PILL ON BTM
	05:00 - 06:00	1.00	06	В	INT1	START WIPER TRIP OF 12 STDS UP TO 6700' BGG 100 CONN GAS 200 MAX GAS 400 60% LS / S0% SILT / 20% SHALE NO ACCIDENTS OR POLLUTION REPORTED FUEL ON HAND 2995 GALS USED 662 GALS
05/26/2004	06:00 - 08:00	2.00	06	В	INT1	FINISH WIPER TRIP TO 6700' AND BACK TO BTM NORMAL 20K DRAG WHILE POOH / 70' FILL ON BTM WASH REAM 70' TO BTM

Operations Summary Report

Legal Well Name:

FEDERAL 28 #4

Common Well Name: FEDERAL 28 #4

Event Name:

DRILLING

Start:

05/04/2004

Spud Date: 05/07/2004

05/27/2004

Contractor Name:

PATTERSON DRILLING CO.

Rig Release: 05/26/2004

End: Group:

Rig Name:

PATTERSON

Rig Name:	1 	ALIER	SON			Rig Number. 503
Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
05/26/2004	08:00 - 10:30	2.50	05	Α	INT1	MIX AND PUMP 80 BBL HI VIS /LCM SWEEP AROUND MIX AND SPOT 80 BBLS HI VIS /LCM PILL ON BTM
	10:30 - 12:00	1.50	24	С	INT1	RU BULL ROGERS LD MACHINE WAIT ON SCIENTIFIC DRILLING GYRO (DID NOT BRING ALL EQUIP)
	12:00 - 13:00	1.00	05	A	INT1	CONTINUE CIRC SPOT 80 BBL HI VIS /LCM PILL ON BTM
	13:00 - 21:30	8.50		ਮਿ	INT1	POOH /LDDP AND BHA BIT OK
	21:30 - 06:00	8.50	12	A	INT1	RU BULL ROGERS CSG TONGS RAN 183 JTS 7" 23# AND 26# J-55 CSG, DV-ECP TOOL
						CETRALIZERS EVERY 80' FROM 7800' TO 6079' TOP DV TOOL WILL BE AT 6796' / FC AT 7713 / EXTERNAL
	Ì	ĺ				COATED PIPE FROM 2182' - 2735'
		-				TAG FILL AT 7758' / RU BJ CMT HEAD TO CIRC. BROKE CIRC AND ATTEMPTING TO WASH 30' TO BTM AT REPORT
	1	{				TIME
		}	}			NO ACCIDENTS OR POLLUTION REPORTED
į	}		}		ļ	FUEL ON HAND 2459 GALS USED 536 GALS
05/27/2004	06:00 - 07:00	1.00	05	A	CSGPRO	
			ł			CIRCULATED CASING VOLUMN
	07:00 - 08:30	1.50	12	С	CSGPRO	BJ SERVICES CMT 1ST STAGE W/ 12 BBLS MUD CLEAN 1 / FB / 86 BBLS (300 SKS)
}				}	}	15:61:11 "C" CMT + 3% SALT + 8#/LCM + .5% FL-25 + .5% FL-52 / MIXED AT 13.2 PPG
		{	[AND 1.61 YLD / MIX AND DISPLACE AT 7 BPM RATE 150 - 650 PSI /
ł			}			DISPLACE W/ 301 BBLS FW /
}		}	1		1	BUMP PLUG ON SCHEDULE / FLOATS HELD HAD 60% RETURNS DURING CMT JOB
	08:30 - 10:30	2.00	12	С	CSGPRO	DROP BOMB AND LET FALL 25 MIN. / PRESSURE UP TO 1400 PSI
İ			j	1		AND SET
}		<u> </u>				ECP PKR AND OPEN DV TOOL / CIRC W/ BJ FOR 1.5 HRS / NO CEMENT IN RETURNS FROM 1ST STAGE
	10:30 - 12:00	1.50	12	С	CSGPRO	BJ CMT 2ND STAGE W/ 146 BBLS (300 SKS) 35:65:6 "C" + 3% SALT
		1	}			+ 1/4#/SK CF + 5#/SK LCM-1 + .3% FL-52 / MIXED AT 12.4 PPG AND 2.06 YLD / FB / 23
1			}			BBLS (100 SKS) "C"NEAT /
						MIXED AT 14.8 PPG AND 1.32 YLD / MIX AND DISPLACE AT 7 BPM
			}			1029 - 2742 PSI / DISPLACE W/ 267 BBLS FW / BUMP PLUG ON SCHEDULE / FLOATS HELD / PLUG
1			}			DWN AT 12:00 NOON (5-26-04)
						RD RL BJ / HAD 90 - 100% RETURNS DURING CMT JOB AND DISPLACEMENT
	12:00 - 13:00	1.00	13		CSGPRO	
	13:00 - 20:00	7.00	14		POST	ND BOP / LIFT STACK AND SET SLIPS W/ 230K WT ON SLIPS /
						CUT OFF CSG / LAY OUT BOP / INSTALL AND TEST 7-1/16" 5M x 11" 3M "B" SECTION AND
		-				DRYHOLE CAP W/ 3" VALVE / TEST HEAD TO 2800 PSI /OK
}						RELEASE RIG AT 20:00 HRS (5-26-04)
			1	1		NO ACCIDENTS OR POLLUTION REPORTED
1	20:00 - 06:00	10.00	01		RDMO	RIGGING DOWN RIG
ł						

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Operations Summary Report

Legal Well Name:

FEDERAL 28 #4

Common Well Name:

FEDERAL 28 #4

Event Name:

DRILLING

Start: Rig Release: 05/26/2004

05/04/2004

Spud Date: 05/07/2004

End: Group: 05/27/2004

Contractor Name: Rig Name:

PATTERSON DRILLING CO. **PATTERSON**

Rig Number: 503