UIC - I - 8-1, 2 & 3

WDWs-1, 2 & 3
PERMITS,
RENEWALS,
& MODS (13 of 18)

2017



NAVAJO REFINING COMPANY Map ID No. ろう Artificial Penetration Review

OPERATOR Pre-Ongard Well Op. LEASE Pre-Ongard WELL NUMBER 1 DRILLED NA PLUGGED 10-10-73	STATUS Plugged LOCATION Sec. 11 -T18S-R27E MUD FILLED BOREHOLE NA TOP OF INJECTION ZONE ~ (148) API NO. 30-015-00870
REMARKS: No casing into Injectio	
	Plug: Surf ω/10 sx Plug: 502-602' ω/60 sx // 133/8" @ 572' ω/700 sx
	Plug: 910'-1010' w 50 sx
	Plug: 1922'-2040' w140 sx > 95/8'@ 1990' w1450s. Cut casing @9601 pulled.
	Plug: 2900'-3400' w1305x
	Plug: 3735'-4119' W/30 SX
	41/2"@ 4500', cut@ 2900', Dulled. PBTD: 4500'
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	eavy mud laden fluid
TD: 72701	

_	-
	et Bureau 42-R358.3. oval expires 12-31-55.

Form 9-331a (Feb. 1951)

(SUBMIT IN TRIPLICATE)

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Land Office
Lense No.
Unit

		GEOLOGICAL	SURVEY		*
				:	
SI	JNDRY NOTI	CES AND I	REPORTS O	N WFIIS	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	CLS AND	CLI OKIS O	M WLLLD	
OTICE OF INTENTIO	ON TO DRILL	X SUB	SEQUENT REPORT OF WAT	ER SHUT-OFF	
TICE OF INTENTIO	ON TO CHANGE PLANS	1 1	SEQUENT REPORT OF SHOO		. 1
TICE OF INTENTIO	ON TO TEST WATER SHUT-OFF	1 1	SEQUENT REPORT OF ALTE		1 1
TICE OF INTENTIO	ON TO RE-DRILL OR REPAIR I	WELLSUB	SEQUENT REPORT OF RE-D	RILLING OR REPAIR	
TICE OF INTENTIO	ON TO SHOOT OR ACIDIZE	SUB	SEQUENT REPORT OF ABAN	IDONMENT	
TICE OF INTENTIO	ON TO PULL OR ALTER CASIN	GSUP	PLEMENTARY WELL HISTOR	ł Y	
TICE OF INTENTIO	ON TO ABANDON WELL				

	(INDICATE ABOVE BY	CHECK MARK NATURE O	F REPORT, NOTICE, OR OTH	ER DATA)	
india C. Sel	hereos.		ín.		
				1.23,	, 19.
A of Sec. and Se		10-5 2-27-	(Meridian)	inte of se	sc
(5) bed. and be	6. 140.) (1 w	p.) (Kange)	(Meridian)	Too Series	
(Field)		(County or Subdivisi	on)	(State or Territory)	
te names of and ex	enected depths to objective sa	DETAILS OF		rasings, indicate myddin	a loba asmont
te names or and ex	pected depths to objective sa ing po	ints, and all other impo	tant proposed work)	asings; indicate muddin	g jobs, cement-
propose to	drill the shore	well with put	my tools to en	approximate è	epth of
O' to took	she and top of	Holdenny. Car	ting brodiens of	11 pe se toffe	
		. Standali	****		
0 1111					
7/30	13-3/6	550	2005 of the	retimi encet	to strenk
2/V	9-5/8	2000	1505 to ten	of Jones from	Colliner and
- 			anakaladang A	S pol, 1/ tol	alm per a
			+ 100 make	must.	
-3/4°	5-1/2	77.000	JCO enable of	nest conect.	
-	~			ir.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
				115	3 (35)
understand that t	this plan of work must receiv	e approval in writing by	the Geological Survey bei	ore operations may be co	mmenced.
npany 🚨	has 110 ballons	Cas Cancana		in the second se	and the second
iipaily					
iress 📜 🌬	z 4 6			/	
			Last	fulande abo	_
			D⊄/ A(/AUA	LIOMILLADI	2-0

U. S. GOVERNMENT PRINTING OFFICE 16-8437-5

Title Claim Suprain

Form 9-330

LOCATE WELL CORRECTLY

Budget Bureau No. 42-R355.2. Approval expires 12-31-52.

U. S. LAND OFFICE LES CYNCES
SERIAL NUMBER LC 068051
LEASE OR PERMIT TO PROSPECT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Lessor	or Tract	Ruth C.	McPhers	on		ess Box 68		lew iteration		
					Field		State 1	ew Mexico		
Well N	o1	Sec. 11	T.18-3	R 27-Е М	eridian N	I P N		k		
Locatio	n 1980 f	$t_{\mathbf{X}} = 0$ of $\underline{\mathbf{S}}$	outhine	and 1980	ft. W of Las	Line of Sec.	11,T-18-S,	Elevation 3593 (Derrick floor relative to sea level)		
	ie informat is can be d			vailable r	records	ect record of the	well and all w	(Derrick floor relative to sea level) ork done thereon		
Date	Novembe	r 26, 19	56	•	Digited	k_		oreman		
Th	e summary	on this pa	ge is for	the condi	tion of the we	ll at above date		·-		
Comme	nced drillin	ıg)- 1	,	19 56 Finis	hed drilling	11-5	, 19. 56 _		
		•		IL OR G	AS SANDS	OR ZONES		, 17. 2 4.		
Jo. 1 f	rom		ta	((Denote gas by G	()				
o. 2. f	rom	• • • • • • • • • • • • • • • • • • • •	to		No. 4	No. 4, from to				
o. 3. f	rem _		to		No. 5	No. 5, from to No. 6, from to				
							to			
o. 1, f	rom		. to	MPORT	ANT WATER					
						, from	to			
					SING RECO		to			
Size	Weight per foot	Threads per inch	Make	Amount		Cut and pulled from	Perforated			
3/8 1		8 Rd	H-40		-			Purpose		
4/8	121486 Lat	A DALATE	Ameo H-40		Guide	None None	1000 0000000000000000000000000000000000	Surface		
ا المالية	THE STATE OF THE S		5	pag jaurijas Titiritassiss Kudi alicinas	े दिया मान्यक्रिक है। जनसङ्ख्यान सम्बद्धाः	្រុកសម្រាប់ គឺ នៅបើផ្តើន នេះ ។ ការបើក្នុង ក្រោះក្រាម មន្ត្រាម	dia 194 e 21 1950 Harriya qenga barre	(ति ः वृश्यं भागवेतः -		
				ilabit kura			1 <u> </u>	<u> Particular delicitada</u>		
			B AT I I D							
Size	117				D CEMENTI	NG RECORD				
sing	Where set	-	r sacks of cer	nent	Method used	Mud gravity	Amount	of mud used		
3/8 5/8	572 1790	700 ax		7.44	Howco					
		plug per	sk.		Howco					
1/2	Casing w									

	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
			TOOLS US	ED		
otary tools	were used from	m fe	et to _ -7270	feet,	and from	feet to fe
able tools w	ere used from	fe	et to	feet	and from	feet to fe
			DATES	1000,	and Hom	reet to re
		, 19	Put	to produ	icing D	-3- 10
			,	omole of	4	ole, 19
nulsion:	% water or	od 97 godiment		arreis or	nuid of which	% was oil;
If was	/0 watter, an	o	kr for farmer	r (*)	Gravity, Bé	/p was on,
ii gas we	en, cu. it. per	24 hours	Gallo	ons gasol	ine per 1,000 c	u. ft. of gas
Rock pre	ssure, lbs. per	r sq. in.		e gas	n jakat ji najiriya	A. Tariya ya tariya say
			EMPLOYE	es ,		
		, Drille			Carr	, Drille
George	Theat	, Drille	r		ab dinniek	Drille
	100 mm 2 42	for	MATION R	ECORD	eri de l'imperiore La constitution	aran ka isa ba
FROM	то-	TOTAL FE	ET		FORMAT	
^		And the second		\ +4 · •		
0.	312	312	man a	1.1		
412	24.0		Hed B	ed	ere on the	•
3 1 2 360	360 482	48	Anhy.	& lime		
360 482	360 482 539	48 122	Anhy.	& lime	· ·	•
360 482 539	360 482 539 630	48	Anhy. Anhy.	& lime	· ·	t sammatan italika. Kansegra majawa saka
360 482 539 630	360 482 539 630 835	48 122 57 91 205	Anhy. Anhy. Anhy. Lime Shale	& lime and anhy. & Lime) : :Konina (sawan) yiri i	in natigita i may pangala saka
360 482 539	360 482 539 630 835 1460	48 122 57 91 205 625	Anhy. Anhy. Lime Shale Lime	& lime anhy. & Lime) Se na Sawang yan Garawayan	in namph i mag gang i linea
360 482 539 630 835 1460	360 482 539 630 835 1460 1679	48 122 57 91 205 625 219	Anhy. Anhy. Lime Shale Lime Shale	& lime anhy. & Lime Anhy.	16 ora Septenty y tel 17 ora	in national magical and an
360 482 539 630 835 1460 1679 1726	360 482 539 630 835 1460 1679 1726 1828	48 122 57 91 205 625	Anhy. Anhy. Lime Shale Lime Shale Shale	and anhy. & Lime Anhy. Anhy. Anhy.	CAMPARTY TO BE OF THE COMPARTY TO BE OFFT.	e nampi megana sebe Tirona aynasi esa at na Ganifa a Maria da an A
360 482 539 630 835 1460 1679 1726 1828	1828 2118	48 122 57 91 205 625 219 47 102	Anhy. Anhy. Anhy. Lime Shale Lime Shale Shale Anhy. Lime	and anhy. & Lime Anhy. Anhy. Shale	oc or seeing group of the control of	· Sindenge i maybelik i sing The Sindenge i sing Symptology si aba i si S
360 482 539 630 835 1460 1679 1726		48 122 57 91 205 625 219 47 102 290 578	Anhy. Anhy. Lime Shale Lime Shale Shale Anhy. Lime	and anhy. & Lime Anhy. Anhy. Shale	oc or seeing re contracts conservages we Dolomite (m. Sand are pro-	i nampi megana da Tirangi dan kemalang Tirangi dan kejadakan d P
360 482 539 630 835 1460 1679 1726 1828 2118 2696 2790	1828 2118 2696	48 122 57 91 205 625 219 47 102 290 578	Anhy. Anhy. Anhy. Lime Shale Lime Shale Shale Anhy. Lime Anhy.	& lime anhy. & Lime Anhy. Anhy. Shale Dolom & Dolom	Consistency pro	e nampi megana da ke da kalabakan dan dampada Myadakan da da
360 482 539 630 835 1460 1679 1726 1828 2118 2696 2790	1828 2118 2696 2790 2917 3026	48 122 57 91 205 625 219 47 102 290 578	Anhy. Anhy. Lime Shale Lime Shale Shale Anhy. Lime Anhy. Lime Lime Lime Lime Lime Lime Lime Lime	& lime Anhy. & Lime Anhy. & Jame Anhy. Shale Dolom & Dolom & Golom & G	oc or known great and considering the consider	in nampi megana da ke nampi angkara dang ngangkara meganaban da ngangkara meganaban da ngangkara meganaban da
360 482 539 630 835 1460 1679 1726 1828 2118 2696 2790 2947 3026	1828 2118 2696 2790 2917 3026 3434	48 122 57 91 205 625 219 47 102 290 578 94 157 79	Anhy. Anhy. Lime Shale Lime Shale Shale Anhy. Lime Anhy. Lime Lime Anhy. Lime Lime Lime Anhy. Lime Lime Lime Lime Lime Lime Lime Lime	& lime anhy. & Lime Anhy. Anhy. Shale Dolom & Dolom & Dolom & Dolom & Dolom & Dolom & Dolom	Considering to Dolomite (m. Sandar production) ite	e nampi megana da ke da kalabakan dan dampada mega melebada da
360 482 539 630 835 1460 1679 1726 1828 2118 2696 2790 2917 3026 3434	1828 2118 2696 2790 2947 3026 3434 4154	48 122 57 91 205 625 219 47 102 290 578 94 157 79 408 720	Anhy. Anhy. Anhy. Lime Shale Shale Shale Anhy. Lime Iime Iime Anhy. Dolomi Dolomi	& lime Anhy. & Lime Anhy. & Jame Anhy. & Dolom & Dolom & Dolom & Dolom & Anh	of or known group of the control of	e nampi megana da ke da kalabakan dan dampada mega melebada da
360 482 539 630 835 1460 1679 1726 1828 2118 2696 2790 2917 3026 3434 454	1828 2118 2696 2790 2917 3026 3434 4154 4505 4558	48 122 57 91 205 625 219 47 102 290 578 94 157 79 408 720 351	Anhy. Anhy. Lime Shale Shale Shale Anhy. Lime Shale Anhy. Lime Colomi Dolomi Dolomi Dolomi	Anhy. A Lime Anhy. An	community of both and a community of the	e nampi megana da ke da kalabakan dan dampada mega melebada da
360 482 539 630 835 1460 1679 1726 1828 2118 2696 2790 2917 3026 3434 454 508	1828 2118 2696 2790 2947 3026 3434 4154 4505 4558 4685	48 122 57 91 205 625 219 47 102 290 578 94 157 79 408 720 351 53 127	Anhy. Anhy. Lime Shale Shale Shale Anhy. Lime Iime Shale Anhy. Deloui Anhy. Dolomi Dolomi Dolomi Dolomi	Anhy. An	Construction of the constr	e nampi megana da ke da kalabakan dan dampada mega melebada da
360 482 539 630 835 1460 1679 1726 1828 2118 2696 2790 2917 3026 3434 454 508 485	1828 2118 2696 2790 2947 3026 3434 4154 4505 4556 4685 5093	48 122 57 91 205 625 219 47 102 290 578 94 157 79 408 720 351 53 127 408	Anhy. Anhy. Lime Shale Shale Shale Shale Anhy. Lime Ilme Shale Anhy. Deloui Anhy. Dolomi Dolomi Dolomi Dolomi Dolomi Dolomi Dolomi Sand & Dolomi	Anhy. Alime Anhy. Alime Anhy. Bolom Anhy. Colom Anhy.	of or known group of the control of	in nampi megana da ke Tirangga ayan keralang Gamiga adak padiba di Managa adak adak ang Managa atawa atawa atawa ke
360 482 539 630 835 1460 1679 1726 1828 2118 2696 2790 2947 3026 3434 454 508 685	1828 2118 2696 2790 2947 3026 3434 4154 4505 4558 4685 5093 5214	48 122 57 91 205 625 219 47 102 290 578 94 157 79 408 720 351 53 127 408 121	Anhy. Anhy. Lime Shale Shale Shale Shale Anhy. Lime Ilme Shale Anhy. Dolomi	Anhy. An	oc or very process of the state	in nampi megana da ke Tirangga ayan keralang Gamiga adak padiba di Managa adak adak ang Managa atawa atawa atawa ke
360 482 539 630 835 1460 1679 1726 1828 2118 2696 2790 2947 3026 3434 454 455 508 508 508 508 508 508 508 508 508 5	1828 2118 2696 2790 2947 3026 3434 4154 4505 4556 4685 5093	148 122 57 91 205 625 219 47 102 290 578 94 157 79 408 720 351 53 127 408 121 506	Anhy. Anhy. Lime Shale Shale Shale Shale Anhy. Lime Ilme Shale Anhy. Dolomi	Anhy. A Lime An	complete and compl	e nampi megana da ke da kalabakan dan dampada mega melebada da
360 482 539 630 835 1460 1679 1726 1828 2118 2696 2790 2947 3026 3434 454 558 685	1828 2118 2696 2790 2947 3026 3434 4154 4505 4558 4685 5093 5214 5722	48 122 57 91 205 625 219 47 102 290 578 94 157 79 408 720 351 53 127 408 121	Anhy. Anhy. Lime Shale Shale Shale Shale Anhy. Lime Ilme Shale Anhy. Dolomi	Anhy. A Lime Anhy. A Lime Anhy. A Lime Anhy. A Lime Anhy. Bolom A Bol	complete and compl	in nampi megana da ke Tirangga ayan keralang Gamiga adak padiba di Managa adak adak ang Managa atawa atawa atawa ke

	NOT THISTO!
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	E 12 4 2 1 49 1 M 1 M 1 M 1 M 1

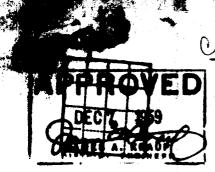
■ 4 *** *******************************	sister.	1	
A Contract of the Action of th		-	**
Commence of the contract of th	21.51	4	
and the second s			
and the second of the second o			
Grant shoo	13.		
	i	rand . s ···	y san A di
o Prince and from		1	
A	r Jakal .	416.5 [1.6.5]	1.6810
eutaka 			
producing			2
SIBHP 2750 Final SiBHP failed, Initial FBH	er aujori ji.	terit ede a la sette	1 6 14 6 B
HHP 2750 Final SIMP failed. Initial PHH	nim OS sas .	to fro work on	ar arrestata
ain. Rec. 60! drig sud and 180' sulphur w	sin S. asco.	1001 58967 100	7# 150
Gellous gasoling per 1,000 out it, of m		Land Margar 24 hoo	S 177
		Final 315#.	
Attal SIP 2665# Pinal 2120#, Initial flow 75#	il <i>•alm</i> 0S⇔a,	Show of Low World	P. Maria Control
Attention 180 drl mud, 370' sulphur water, no	`obeu 5−7\£	tooa 6829-5899	E# Teg
	991244		
Fig. Final flowing 600 Psic.	T LTOMTUR OF	30 min. Initia	!
icly gas cut.30 min. initial BisIP 2390, Cinal	MACEL DITE	mudins Aires	11 2 *11
Lanil .0982 912 H [attint nim 08, tun san 164.	ohen FORW	TOO1 10C0-1020	Z# ISC
May felt blow throughout test, Rec. 1350' of	CLI-C man	1004 1069 1969	Cil. mac
FORMATION	430A 174.00	- 4.7	
The state of the s	( C (	Fruet Philp 654	
MADEL SIN LINE LINET WILL CAR CARE	IT' ESS' OL	ENG DU POUE	
MACAL SIN LING TOWN TOWN 1 1/C . JAMES	IT' ESS' OL	ENG DU POUE	T# 490
Tell blew of air 1-1/2 hr. & died. Rec. 301 dweter. 3/L hr. Final EHPSI 65#, Init. FERP 55#	open 2 hrs.	STREETS FOOT	₹ <u>.190</u>
miter; % do show.  [24] blew of sir 1-1/2 hr. & died. Rec. 30' d  water. 3/4 hr. Final EHPSI 65#, Init. FERP 55#	o x 1 k dolo open 2 hrs. 11, gas, or	3-1/2, sp macr	
miter; % show.  (alf blew of air 1-1/2 hr. & died. Rec. 30' of water. 3/4 hr. Final Effel 65#, Init. Fixip 55#	o x 1 k dolo open 2 hrs. 11, gas, or	3-1/2, sp macr	₹#¥90 ₹# <b>₹</b> \$\$
der dense fine crystallin shaly dolomite and mitegal, Ho show.  Talk blew of air 1-1/2 hr. & died. Hec. 30° of the str. 3/4 hr. Final Hipsi 65%, Init. Finit 55%	o x 1 k dolo open 2 hrs. 11, gas, or	3-1/2, sp macr	
der dense fine crystallin shaly dolomite and mitegal, Ho show.  Telf blew of air 1-1/2 hr. & died. Rec. 30' o water. 3/4 hr. Final EHPSI 65#, Init. FERP 55#	o x 1 k dolo open 2 hrs. 11, gas, or	SLSS-6737 Res	
dent dense fine crystallin shaly dolomite and mitery, Ho show.  Talk blew of air 1-1/2 hr. & died. Hec. 30' of mater. 3/4 hr. Final HiPSI 65#, Init. Finip 55%	. 10-17, 7: . 10-17, 7: . open 2 hrs. . tai, gas, or	Stain & odor. 6723-6737 Rest. 2512 tool mud, ho show o	
point poresity & poor to good scattered oil density density density and miters, he show.  Telf blow of air 1-1/2 hr. & died. Hec. 30° of the show of air 1-1/2 hr. & died. Hec. 30° of the show of air 1-1/2 hr. & died. Hec. 30° of the show of the short water.	uegy to pin.  10-1/2, 7.  ox 1, gas, or	stain & odor.  SLSS-237 Headles and a microscope and a microscope and a microscope and a show of the s	7# 9340
point poresity & poor to good scattered oil dead dense time crystallin shalf dolomite and mitery, Ho show.  Talk blew of air 1-1/2 hr. & died. Hec. 30? of the show.	uegy to pin.  10-1/2, 7.  ox 1, gas, or	stain & odor.  SLSS-237 Headles and a microscope and a microscope and a microscope and a show of the s	
fine to medium crystallin dolomite w/large and point, poresity & poor to good scattered oil dent dense fine crystallin shaly dolomite and miter, to show.  Talf blow of air 1-1/2 hr. & died. Rec. 30° of the show.	LL Brown  10-1/2, 7'  20 x L dolo  x L dolo  y x L dolo	2500-2512 Respectively of the state of the s	7# <b>3.40</b> 0
Time to medium crystallin dolomite w/large and point, point point to good scattered oil dent dense line crystallin shaly dolomite and miter, he show.  Talf blew of air 1-1/2 hr. & died. Hec. 30. comite and the show.	TI Brown  TI Room S. VI.  TI Brown  TI Room S. VI.	2500-2512 Restructuations & march odor.  2-1/2'sh macrestructus & odor.  5-2/2'sh macrestructus & odor.	E# =100
Time to medium crystallin dolomite w/large and point, point point to good scattered oil deright done of air l-1/2 hr. & died. Rec. 30. Clark blew of air l-1/2 hr. & died. Rec. 30. Clark blew of air l-1/2 hr. & died. Rec. 30. Clark blew of air l-1/2 hr. & died. Rec. 30. Clark blew of air l-1/2 hr. & died. Rec. 30. Clark blew of air l-1/2 hr. & died. Rec. 30. Clark blew of air l-1/2 hr. & died. Rec. 30. Clark blew of air l-1/2 hr. & died. Rec. 30. Clark blew of air l-1/2 hr. & died. Rec. 30. Clark blew of air l-1/2 hr. First blew of air l-1/2 hr. First blew of air l-1/2 hr. First blew of air l-1/2 hr. & died. Rec. 30. Clark blew of air l-1/2 hr. First blew of air l-1/2 hr. First blew of air l-1/2 hr. First blew of air l-1/2 hr.	TI Brown  TI Room S. Dr.  TI Brown  TI Room S. Dr.  TI Brown	2500-2512 Restructuations & march odor.  2-1/2'sh macrestructus & odor.  5-2/2'sh macrestructus & odor.	7# <b>3.40</b> 0
ITTE Limy dolomite w/streeks gray shale 1775— Inc. to medium crystallin dolomite w/large and point poresity & poor to good scattered oil  dent dense tine crystallin shaly dolomite and miter, ho show.  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:  Talf blew of air 1-1/2 hr. & died. Hec. 30:	201 1758- 11 brown 11 brown 10-1/2, 7' 0 x l g dolo 0 x l g dolo 2 hrs.	1758 1780 Recard by 2500-2512 Recard by 2500-2	7# <b>3.40</b> 0
The law delay inclusion.  In Line to medium crystallin delemite w/arreaks and parocity.  Inclusive medium crystallin delemite w/large and point point point to good scattered oil carreage fine crystallin shaly delemite and miteral how.  In the play of air 1-1/2 hr. & died. Hec. 30. Carreage and carreage fine crystallin shaly delemite and carreage fine crystallin shall delemite and carreage fine crystallin shall delemite and carreage fine crystallin shall be seen and carreage fine crystallin shall be seen and carreage fine crystallin shall be seen and carreage fine crystalling shall be see	20. 1758- 20. 1758- 11. brown 11. brown uggy to pin o x l k dolo o x l k dolo o x l k dolo	and wery thin said the brown said 2500-2512 Hee brown said brown said the brown said the brown show of the brown said the brown show of the brown show of the brown said the brow	7# 9.400 E# 9.400 E# 9.400
The law conte w/streaks gray shale 1775—1775 limy dolomite w/streaks gray shale 1775—1775 limy dolomite w/streaks gray shale 1775—1775 limy dolomite w/large and carrent poresity & poor to good scattered oil carrent, we show.  The play of air 1-1/2 hr. & died. Hec. 30° of the show.  The play of air 1-1/2 hr. & died. Hec. 30° of the show.	20. 1758- 20. 1758- 11. brown 11. brown uggy to pin o x l k dolo o x l k dolo o x l k dolo	and wery thin said the brown said 2500-2512 Hee brown said brown said the brown said the brown show of the brown said the brown show of the brown show of the brown said the brow	7# 9.400 E# 9.400 E# 9.400
ITTE Limy dolomite w/streeks gray shale 1775— Ing. to medium crystallin dolomite w/large and point poresity & poor to good scattered oil  dell plew of air 1-1/2 hr. & died. Hec. 30.  Talf blew of air 1-1/2 hr. & died. Hec. 30.  Talf blew of air 1-1/2 hr. & died. Hec. 30.  Talf blew of air 1-1/2 hr. & died. Hec. 30.  Talf blew of air 1-1/2 hr. & died. Hec. 30.  Talf blew of air 1-1/2 hr. & died. Hec. 30.  Talf blew of air 1-1/2 hr. & died. Hec. 30.  Talf blew of air 1-1/2 hr. & died. Hec. 30.  Talf blew of air 1-1/2 hr. & died. Hec. 30.  Talf blew of air 1-1/2 hr. & died. Hec. 30.  Talf blew of air 1-1/2 hr. & died. Hec. 30.  Talf blew of air 1-1/2 hr. & died. Hec. 30.  Talf blew of air 1-1/2 hr. & died. Hec. 30.  Talf blew of air 1-1/2 hr. & died. Hec. 30.	20. 1758- 20. 1758- 11. brown 11. brown uggy to pin o x l k dolo o x l k dolo o x l k dolo	and wery thin said the brown said 2500-2512 Hee brown said brown said the brown said the brown show of the brown said the brown show of the brown show of the brown said the brow	7# 9.400 E# 9.400 E# 9.400
rows to ten fine envetablin lime and dolomite by shale and enfir inclusion.  1775 Limy dolomite w/streaks gray shale 1775— in flaurescent and perocity.  Time to medium crystallin dolomite w/large and point, poresity & poor to good scattered oil day, the show.  Talk blew of air 1-1/2 hr. & died. Hec. 30! of the show.  Talk blew of air 1-1/2 hr. & died. Hec. 30! of the show.	20. 1758- 20. 1758- 11. brown 11. brown uggy to pin o x l k dolo o x l k dolo o x l k dolo	and wery thin said the brown said 2500-2512 Hee brown said brown said the brown said the brown show of the brown said the brown show of the brown show of the brown said the brow	7# 9.400 E# 9.400 E# 9.400
roum to ten fine envetallin lime and dolomite by shale and the envetallin lime and dolomite with the garocity.  I'll lime to medium crystallin dolomite willered and parocity.  Time to medium crystallin dolomite willered oil doing poremity & poor to good scattered oil doing poremity & poor to good scattered oil doing the show.  Introduce and control of the show.  Introduce and control of the show.  Introduce and control of the show.	8: Light by 2018 treat of graduate 200, 1758 to 200, 200, 200, 200, 200, 200, 200, 200	27.50-1758 Hee, 27.50-1758 Hee, 25.00-25.12 Hee, 25.00-25	CATE #3
rows to ten fine envetallin lime and dolomite by shale and entry inclusion.  I've and entry inclusion.  I've and entry inclusion.  I've and parocity.  I've and bear old and cattered oil and the show.  I've and	196. 11. 196. 17.58. 17. 17.58. 17. 17.58. 17. 17. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19	TYSO-TYSE Recard than sand very brown sand very heer than sand sand than 1750-1751 an mich sand than 1750-1751 and than 1750-1751	COLG #7 COLG #3 COLG #7
Polomite & Lime envetallin lime and dolomite to grave gray shale and senty inclusion.  1715 Limy dolomite w/streaks gray shale 1775— 1715 Limy dolomite w/streaks gray shale shale shale shows a show.  1716 Limy dolomite w/streaks gray shale shale shows a show.  1716 Limy dolomite show.  1716 Limy dolomite show.  1717 Limy dolomite show.  1717 Limy dolomite show.  1718 Limy dolomite show.	8 11eht by tream of grand star 10-17s, 71 own 20-17s, 71 open 2 hrs. or 11 gas, or 12, gas, or 2 kgs, or 3	TYSO-TYSE Heer TYSO-TYSE Brown sand rety heer than 1750-1758 Heer TYSO-1758 HEER TY TYSO-1758 HEER TYSO-1758 HE	7# 2300 2# 2300 7# 2300 1401 1401 1901
Delegate & Shale rown to ten time graystallin lime and dolomite  1775 limy dolomite w/streaks gray shale 1775—  1775 limy dolomite w/large anh  1775 lime to medium crystallin shaly dolomite anh  1776 lime to medium crystallin shaly dolomite anh  1777 lime to medium crystallin shaly dolomite anh  1777 lime to medium crystallin shaly dolomite anh  1777 lime to medium crystallin shaly dolomite anh	124. 124. 1296. 1296. 1296. 1296. 1296. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 27	TYSE TYSE Heer 1750-1751 Show of 1750-1758 Heer 175	7# 23400 E# 23000 T# 23000 1/401- 2569
polarite & Shale rows to the Englands of the Shale rows to tend enhance and colomite with the same such perceits.  I'll limy dolomite w/streeks gray shale l???— I'll limy dolomite w/streeks gray shale l???— I'll porestiff & poor to good scattered oil dead perceity.  Cast dead soor to good scattered oil dead dead show.  Ist blow of air l-l/2 hr. & died. Hec. 30! of the show.  Ist blow of air l-l/2 hr. & died. Hec. 30! of the show.	124 124 134 146 156 166 1758 1758 1758 1758 1758 1758 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860 1860	STESS HOSE  STESS STESS  STESS STESS  STAND STAND  STAND STAND STAND  STAND STAND  STAND STAND  STAND STAND  STAND STAND	7# 93400 E# 93000 T# 93000 1401 1401 1500 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600 1600
Helenite & Shale rown to ten fine endy tartellin lime and dolomite  I the law end entry inclusion.  I the law endem crystallin dolomite w/large and dolomite w/large and dolomite w/large and perocity.  Inclusion medium crystallin dolomite w/large and dolomite w/large show.  I the plaw of air l-l/2 hr. & died. Hec. 30: control werer. 3/4 hr. Final HiPSI 65%, Init. FHHP 55%	61 224 224 224 224 224 224 224 224 224 22	STESS HOSE  STEEL & Odor  STATE BY BE HOSE  STATE BY BE HOSE  STATE BY BE HOSE  STATE BY BE HOSE  STATE BY BY STATE  STATE BY STATE  STATE BY STATE	7# 93400 E# 93000 T# 93000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000 11000
polarite & Shale rows to the End and and and and and and and and another another and another another and another anoth	124. 124. 1296. 1296. 1296. 1296. 1296. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 2796. 27	200-2212 tool 2-1/2' sh microscol 2-1/2' sh microscol 2500-2512 Hee 2500-2512 Hee 2500-2512 Hee 2750-1758 Hec 1750-1758 Hec	7# 93400 E# 93000 7# 93000 14000 14000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000 15000
polonite & Shale  polonite & Shale  polonite & Shale  rown to ten time graystallin lime and dolomite  I'le lime to medium crystallin dolomite w/large and  fine to medium crystallin dolomite w/large and  fine to medium crystallin ahaly dolomite and  form to medium crystallin ahaly dolomite and  form to medium crystallin ahaly dolomite and  dest dense time crystallin shaly dolomite and  dest dense to medium to good scattered oil  dest dense to good scattered oil  dest dense to sood scattered oil  dest dense to sood scattered oil  form to show.  The show.  T	219 61, 219 61, 21, 21, 21, 22, 21, 22, 22, 23, 24, 25, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 21	2655-2512 tool 2-1/2' sh microscol 2-1/2' sh microscol 2500-2512 Hee 2500-2512 Hee 2500-2512 Hee 2750-1758 Hec 1750-1758 Hec	7# 93490 1002 1002 1002 1002 1002 1002 1002 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 1003 10
polonite & Shale  polonite & Shale  polonite & Shale  polonite & Shale  roum to ten fine graystallin lime and dolonite  I'll lime to medium crystallin dolonite w/large and  fine to medium crystallin dolonite w/large and  fine to medium crystallin shaly dolonite and  dest dense fine crystallin shaly dolonite and  dest dense fine crystallin shaly dolonite and  dest dense fine fine crystallin shaly dolonite and  dest dense fine fine crystallin shaly dolonite and  dest dense fine fine fine fine show.	129 519 61 519 61 519 61 519 61 519 61 519 61 519 61 519 61 519 61 519 61 61 61 61 61 61 61 61 61 61 61 61 61	SLASS Received to the control of the color o	7# 93400 Z# 9300 Z# 9300 7# 9300 7401 7569 7569 7699 7699 7699
polonite & Shale  polonite & Shale  polonite & Shale  rows to ten time graystallin lime and dolonite  I'll lime to medium crystallin dolonite w/large and  time to medium crystallin dolonite w/large and  fine to medium crystallin dolonite w/large and  formation of air 1-1/2 hr. & died. Rec. 30' d  fair to show.  Talk blew of air 1-1/2 hr. & died. Rec. 30' d  fair to show.  Talk blew of air 1-1/2 hr. & died. Rec. 30' d  fair to show.	219 61, 219 61, 21, 21, 21, 22, 21, 22, 22, 23, 24, 25, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 22, 21, 21	2655-2512 tool 2-1/2' sh microscol 2-1/2' sh microscol 2500-2512 Hee 2500-2512 Hee 2500-2512 Hee 2750-1758 Hec 1750-1758 Hec	24 2400 24 2400 24 2400 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 100

Form C-103 (Revised 3-55)

#### NEW MEXICO OIL CONSERVATION COMMISSION MISCELLANEOUS REPORTS ON WEILES

(Submit to appropriate District Office as per Commission Rule 1106)

COMPANY	Pan Ameri	ean Petrol	our Corp	oration,	Box (	8, Hob	bs, Hen	Nexte		
			(Addr	ess)						
LEASE Buth	C. McPherson	WEL	L NO.	1 UN	IT ,	S	11 7	7.0	R	- 14 - 14
DATE WORK			1	PC	OOL		elenet		-	<del></del>
					·					
This is a Rep	ort of: (Ch	eck appro	priate bl	lock)		Results	of Te	st of C	Casing	Shut-off
Begi	nning Drilli	na Onemat	ions			Remedi	al War	.l-		
<del></del>		ing Operat	lons		<u></u> '	cemear	ai woi	K.		
Plug	ging				<b>x</b> (	Other	Chan	ge in	Coupen	r name
Detailed acco	unt of work	done nat	ure and	quantity	of m	aterial	e need	and r	esults	obtained
FILL IN BEL		EMEDIAL	WORK I	REPORT	rs <u>ON</u>	LY	· ·			
Original Well DF Elev.	Data:	חחח		<b>D</b> 1	<b>.</b> .			1.5		
Tbng. Dia	Tbng D	PBD enth	Oi.	_Prod. l String	<del></del>	., <u></u>		npl Da ring I		<del></del>
Perf Interval						· · · · · · · · · · · · ·		6 -	, opu	
Open Hole Int	· ′	]	Producir	ng Form	ation	(s)			<del></del>	
			·		· · · · · · · · · · · · · · · · · · ·	· · ·				
RESULTS OF	WORKOVE	R:				BEF	ORE	•	AFTE	3
Date of Test		•								
Date of Test										
	n, bbls. pe	r day						-		<del></del>
Oil Production	-	•								
Oil Production Gas Production	on, Mcf per	day				-		-		
Oil Productio Gas Productio Water Produc	on, Mcf per	day per day						- -		
Oil Production Gas Production Water Produc Gas-Oil Ratio	on, Mcf per tion, bbls.	day per day er bbl.						- - - - - - -		
Oil Production Gas Production Water Product Gas Oil Ration Gas Well Pote Witnessed by	on, Mcf per tion, bbls. o, cu. ft. pe	day per day er bbl.						- - - -		
Oil Production Gas Production Water Produc Gas-Oil Ration Gas Well Pote	on, Mcf per tion, bbls. o, cu. ft. pe	day per day er bbl.		I housh				mpany		
Oil Production Gas Production Water Production Gas Oil Ration Gas Well Pote Witnessed by OIL CONS Name	on, Mcf per tion, bbls. o, cu. ft. pe	day per day r bbl. per day	SION	I hereb above i my kno Name Positio Compan	s true wledg	and co	t the in	forma	ation gi	



N. M. O. C. C. COPY

#### UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY



MAR 7 1962

# SUNDRY NOTICES AND REPORTS ON WELLSARTESIA, OFFICE

	MOTOR OF THE		REPORTS ON WELLSARTESIA, OF	
	MOTICE OF INTENTION TO BOALS.			Ţ
	MOTICE OF INTENTION TO CHANGE PLANS.	-+	SUBSEQUENT REPORT OF WATER SHUT-OFF.	
	THE PARTY NAMED IN COLUMN		SUBSEQUENT REPORT OF SHOOTING OR ACIDEZING.	l
		+	SUBSIGNATION OF ALTERNIS CAMES.	l
1	MOTICE OF INTENTION TO SHEET OR ACIDIZE	7	SUBSECUENT REPORT OF RE-DMILLING OR REPAIR.	
ı	MOTICE OF INTENTION TO PALL OR ALTER CASING.	1	SUBSEQUENT REPORT OF ARAMOOMMENT.	
L	TO ABANGON WILL	1	MATTER WELL HISTORY	
		1		
	(INDIGATE ABOVE BY GHECK MARI	K MATI	UME OF REPORT, NOTICE OF	
D	Ah		CHT, NOTICE OF COMME	

Ruth C.	Kernferson
---------	------------

Well No. 1 is located 1980 ft. from S W/4-SE/4, Sec. 11 line and 1980 Mildest

The elevation of the derrick floor above sea level is 3593 ft. RDB

JAN 29 1962

#### DETAILS OF WORK

S. GEOLLIS AL SURVEY FTES A TIZM MEKICO

re sander abow alone, weights, and lengths of p 5 points, and all other important proposed we On 11-11-59 P X A eperations were completed. Work done and plugs set as fellows:

Cut and pulled 9 5/8" casing @ 960'.

Set 25 sx cement plug @ 960'; 15 sx cement in bettem of 13 3/8" easing @ 2. 572'; 10 ax ement plug at surface. All intervals filled with heavy 3.

Set P I A marker; restored ground to natural contour.

RECEIVED

DEC 7 1959

U. S. GEOLOGICAL SURVE ESSA NEW MEXICO

Pan American Petroleum Corporation

Dox 66

Hobbs, Now Mexico

9-331 C
z 1983)

## N. M. O. C. C. SUBMIT IN TRIP CATE - Form approved. Budget Bureau

	1 144 414	SPECTO	Larry .	
Bud	lget I	Bureau	No.	42-R142
_	-1	0 1		

(May 1963)	U DEPARTMEN	ED STATES		reverse sic	on •	Copy to SF  5. LEASE DESIGNATION AND SERIAL NO.
		GICAL SURVI				NM-6850
APPLICATION				N, OR PLUG B	ACK	6. IF INDIAN, ALLOTTEE OR TEIBE NAME
1a. TYPE OF WORK DRI b. TYPE OF WELL	<b>LL</b>	DEEPEN_[	]	PLUG BAC	к 🗆	7. UNIT AGREEMENT NAME
OIL C	ELL OTHER F	Re-Entry	SIN	GLE X MULTIPL ZONE	E	8. FARM OR LEASE NAME Ruth C. McPherson
Bill J. Sm 3. ADDRESS OF OPERATOR			· · · ·		<u> </u>	9. WELL NO.
1504 Stag	gecoach Dr.,	Arlington	n, Te	xas, 76013 ate requirements.*)		10. FIELD AND POOL, OR WILDCAT  Artesia
At proposed prod. zon						11. SEC., T., R., M., OR BLE.  AND SURVEY OR AREA  Section 11, T-18-S  R-27-E
14. DISTANCE IN MILES A 14 miles	east of Arte					12. COUNTY OR PARISH 13. STATE  Eddy New Mexico
15. DISTANCE FROM PROPO LOCATION TO NEAREST PROPERTY OR LEASE L (Also to nearest drig		660•		of acres in lease	TO T	of acres assigned HIS WELLO
18. DISTANCE FROM PROP- TO NEAREST WELL, DI OR APPLIED FOR, ON THE	RILLING, COMPLETED,	none		1800		otary
21. ELEVATIONS (Show who	ether DF, RT, GR, etc.)					22. APPROX. DATE WORK WILL START* September 15, 1970
23.		PROPOSED CASE	NG AND	CEMENTING PROGRA	М	
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER F	оот	SETTING DEPTH		QUANTITY OF CEMENT
17"	13 3/8#   9 5/8#	N/A*		572 <b>'</b> 1990	70	
stub with	casing bowl	and 32.3	# 9	: 1900', tie 5/8" casing, ce as necessa	peri	9 5/8" casing forate indicated at test.
Casing serwas not pr	D DOODOSED DENCEMAN - If	originall; 3" casing	nen or D	llled in 1956 at 960' and	pulle	luctive zone and, proposed new productive
zone. If proposal is to preventer program, is an 24.	drill or deepen direction	ally, give pertinen	t data o	n subsurface locations an	id measure	d and true varice richts. Give blowout
SIGNED DU	Shri	1/6 TI	TI.E			DATS 9.1-70
•	ray or State office use)		-, , , , , ,	MADONAL DATE	•	
APPROVED BY	につく	-	I OPE	NTHE	. ' '	RECEIVED
ADD R (PPRO	AL, IF ANY:	IS RESCINDE	1978			<b>SEP</b> 9 1970
ACTION STATE	KMA NIT THIS APPRE		uctions	On Reverse Side	saka e sa jako.	D. C. C.
<b>1</b>						

# MEXICO OIL CONSERVATION COMMISS WELL LOCATION AND ACREAGE DEDICATION PLAT

All distances must be from the outer boundaries of the Section.

		An astance	- must be read a	outer outside the		·	·								
Operator Bill J.	Smith		Lea	Ruth C. M	cPherso	n	Well No.								
Unit Letter J	Section 11	Township 18-S		Range 27-E	County	ddy									
Actual Footage Local		uth	line and	L980	feet from the	East	line								
Ground Level Elev: 3580	Producing Form		Poc	Artesia		1	ated Acreage: 40								
	e acreage dedicat	l or hachure	marks on the pla												
	2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).  RECEIVED														
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc?  SEP 9 1970															
Yes No If answer is "yes," type of consolidation															
this form i	f necessary.)						(Use reverse side of								
							ization, unitization, oved by the Commis-								
	 	T				CER	TIFICATION								
						1	that the information con- true and complete to the ledge and/kelief.								
	+		<del>_</del>			Position Position	Shulls								
	l i			) 		Company									
	1			 		Date	The second secon								
				1980	, .	shown on this pl	that the well location at was plotted from field								
				17780	<del>-</del>	under my superv	surveys made by me or ision, and that the some rect to the best of my elief.								
	 		386	1			Original Plat								
·	! ! !			1		Registered Profess and/or Land Surve									
				<u> </u>		Certificate No.									
C 330 660	90 1320 1650 198	2310 2640	2000	1500 1000	500 0	J									

1-8-71 10-26-70 9-28-70 TEMPORARILY ABANDONED CSGA SX. TUBING 13 3/8" at 572' w/700 8x 9 5/8" at 1990' w/450 sx 4 1/2" at 4500' 9-22-70 CONT LOGS EL GR RA IND HC A 1 McPherson, Ruth C. Sec 11, T-18-S, R-27-E 1980' FSL, 1980' FEL of Sec Re-Cmp 4-19-71 SMITH, BILL J. Acid (4070-4100') 3000 gals Swbd blk sul wtr (4070-4100') TD 7270'; PBD 4500'; SI
TD 7270'; PBD 4500'; SI
TD 7270'; PBD 4500'; SI TD 7270'; PBD 4500'; Prep PB to Grayburg Cleaned Out to 4500'
Ran 4 1/2" Casing
Perf (Yeso) 4070-4100' F.R. 9-15-70; Opr's Elev. 3580' GL (Orig. Stanolind Oil & Gas #1 McPherson-Feder:1, P&A 11-7-56, OID 7270') PD 1800' WO (Crayburg) Distribution limited and publication prohibited by subscriben' agreement.

Reproduction rights reserved by Williams & Lee St. suting Scroice, Inc.

PROP DEFTH 1800' (Fulled) TD 7270'; PBD 4500' FORMATION DATUM CLASS STATE NM MH 00870 FORMATION Jamos CO.ORD X > TYPE WU EL 3592 MUTAG

EDDY Artesia NM Sec 11,T18S,R27E SMITH, BILL J. 1 McPherson, Ruth C. Page #2 2-22-71 TD 7270'; PBD 4500'; SI 4-12-71 TD 7270'; PBD 4500'; SI

4-12-71 4-19-71 4-22-71

COMPLETION REPORTED

TD 7270'; PBD 4500'; TEMPORARILY ABANDONED

10-26-70 9-28-70 9-22-70 DATE TEMPORARILY ABANDONED CSGA SX. TUBING 13 3/8" at 572' w/700 sx 9 5/8" at 1990' w/450 sx 4 1/2" at 4500' LOGS EL GR RA IND HC A Re-Cmp 4-19-71 1 McPherson, Ruth C. Sec 11, T-18-S, R-27-B 1980' FSL, 1980' FEL of Sec Acid (4070-4100') 3000 gals Swbd blk sul wtr (4070-4100') TD 7270'; PBD 4500'; SI TD 7270'; PBD 4500'; SI TD 7270'; PBD 4500'; SI PD 1800' WO (Crayburg)
(Orig. Stanolind Oil & Gas #1 McPherson-Feder&1,
P&A 11-7-56, OID 7270')
TD 7270'; PBD 4500'; Prep PB to Grayburg
Cleaned Out to 4500' Ran 4 1/2" Casing Perf (Yeso) 4070-4100' F.R. 9-15-70; Opr's Elev. 3580' GL imited and publication prohibited by subscribent agreement in rights reserved by Williams & Lee St outing Service, Inc.

PROP DEPTH 1800 (Pulled) TD 7270'; PBD 4500' FORMATION DATUM CLASS STATE NM MH 00870 FORMATION Jamo CO.ORD ¥ TYPE WU EL 3592 DATUM

EDDY 4-12-71 SMITH, BILL J. 2-22-71 TD 7270'; PBD 4500'; SI
TD 7270'; PBD 4500'; SI
TD 7270'; PBD 4500'; TEMPORARILY ABANDONED 1 McPherson, Ruth C. Artesia M Sec 11,T18S,R27E C. Page #2

4-19-71

4-22-71

COMPLETION REPORTED

	NI I	W. O. C. C.	COPT	copy " st
Form 9 AM (May 1963)		ATES HE INTERIOF	SUBMIT IN TRIPL	Form approved. Budget Bureau No. 42-R1424. 5. LEASE DESIGNATION AND SERIAL NO.
	ORY NOTICES AND	REPORTS ON	to a different reservoir	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
WELL WELL	OTHER DRY-	IOLE RE	-ENTRY	7. UNIT AGREEMENT NAME  8. FARM OR LEASE NAME
1	tion Company ECE		3 · · · · · · · · · · · · · · · · · · ·	SMITH MCPHERSON
BOX 68, HOBBS, 1	L M. 88240	3 1973 111	13/91 WHATE	9. WELL NO.
4. The Afflex of Well, (Re See itse space 17 belo At surface	eport location clearly and in acco	ofdance with any State	e telutremente	10. FIELD AND POOL, OR WILDCAT  WILDCAT  11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
1980 FSL x	(1980 EL Sec.	ע דומט) וו	MW/4 SE/4)	11-18-27 NMPM
14. PERMIT NO.	15. ELEVATIONS	Show whether DF, RT, $593$ $D$ .	GR, etc.)	EDDY N.M.
16.	Check Appropriate Box	To Indicate Natu		i.
N	OTICE OF INTENTION TO:		SUBSI	EQUENT REPORT OF:
TEST WATER SHUT-OF	-		WATER SHUT-OFF	REPAIRING WELL
FRACTURE TREAT SHOOL OR ACIDIZE	MULTIPLE COMPLE	CTE	FRACTURE TREATMENT SHOOTING OR ACIDIZING	ALTERING CASING ABANDONMENT®
REPAIR WELL	CHANGE PLANS		(Other)	
(Office)			Completion or Recor	lts of multiple completion on Well upletion Report and Log form.)
17. b) Serine Proposed or proposed work. If	COMPLETED OPERATIONS (Clearly well is directionally drilled, giv	state all pertinent de e subsurface locations	tails, and give pertinent dat and measured and true ver	es, including estimated date of starting any ical depths for all markers and zones perti-
Physics	al abandor	ment	of well co.	ncluded 6-6-73.
// //	land aban		<i>  </i>	
Filled	t hole up m	ud. (PE		.,
Spatte	d 30 py leme	nt plug	4119-3735	5 (BUN. PERS. 4100-4070)
	pulled 4/2"	// //		
Spatter	. 30 5x elmini			n+Out J4%" Dtub)
No 95	40 Sx " B" Casing for	ind in	040-1922' Hole	
Spatter	150sx. Urhin	plug !	1010-910' 602: 502'(1 Surjace ! L	1376° C5A 572) ricted Po A marken.
Location	c shall be c	leaned		4
SIGNED	the foregoing is true and correct		ENGINEER	DATE 6-15-73
This space for Feder	ral or State office use			3 3
APPROVED BY CONDITIONS OF AP	TROVAL INTENSE	TITLE		DATE
04 4- USGS KAPP	31072			
1-505A 1-12RY	BEEKMAN LER BEER	See Instructions or	n Reverse Side	
2. HRCOVIII PLA	STOP TO STOP T			



# NAVAJO REFINING COMPANY Map ID No. 40 Artificial Penetration Review

OPERATOR Pre-Ongard Well Op.  LEASE Pre-Ongard  WELL NUMBER 1  DRILLED NA  PLUGGED NA  REMARKS: Calculated Top of Cement b	STATUS Pluged  LOCATION Sec. 11 -T18S-R27E  MUD FILLED BOREHOLE NA  TOP OF INJECTION ZONE 70701  API NO. 30-015- 20510
	2 113/4"@ 1000' w/ 9705x
	992 perfs: 1049'-1050' cement retainer @ 950' 592 350 5x @ Surf. in 113/4"
77/////PI	lug: 5350' W ZG sx lug: 6211'-6400' W 40 sx 35/8" @ 6348 W 300 sx
₱ ₱ Perfs: `	0 6996' W 15 sx 7046'-7388' 7613'-7863' W 25 sx
# Perfsi C	19495' w 5 =x on top 19621'-9929' liner @ 6277'-10,138' w 855 =x

## NET MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102 Supersedes C-128 Effective 1-1-65

All distances must be from the outer boundaries of the Section.

AMOCO PRODUCTION COMPANY MALCO "A" FEDERAL 3  Total Letter Section Township Range County  F 11 18 SOUTH 27 EAST EDDY  Cital Feet from the NORTH line and 1653 feet from the WEST line	Lerator					Lease						Well No.
In the second processing processing and the second second process of the second pro		CO PR	ODUCTI	ON COMF	ANY		MALCO 1	'A'	FEDER	AL		3
18 SOUTH	'nit Letter					Ranc						
1. Outline the acreage dedicated to the subject well by colored pencil or hackure marks on the plat below.  2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).  3. If more than one lease of different ownership is dedicated to the well, have the interests of all namers been consolidated by communitization, unitization, force-pooling, etc?  2. If more than one lease of different ownership is dedicated to the well, have the interests of all namers been consolidated by communitization, unitization, force-pooling, etc?  3. If masser is "yes." type of consolidation  If answer is "no." list the owners and tract descriptions which have actually been consolidated. (Use reverse wide of this form if necessary.)  No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.  CERTIFICATION  1 hereby certify that the information contained barries is true and complete to the best of my non-ledge and before.  1. Non-live the information contained barries is true and complete to the best of my non-ledge and before.  1. Non-live the information contained barries is true and complete to the best of my non-ledge and before.  1. Non-live the information contained barries is true and complete to the best of my non-ledge and before.  1. Non-live the information contained barries is true and complete to the best of my non-ledge and before.  1. Non-live the information contained barries is true and complete to the best of my non-ledge and before.  1. Non-live the information contained barries is true and complete to the best of my non-ledge and before.  1. Non-live the information contained barries is true and complete to the best of my non-ledge and before.  1. Non-live the information contained barries is the information contained barries is the information containe	F			18 S	оитн	2	7 EAST	1		EDDY		
1. Outline the acreage decided to the subject well by colored pencil or hachure marks on the plat below.  2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).  3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?  Yes No. If answer is "'no." list the owners and tract descriptions which have actually been consolidated. (Use reverse sade of this form recessary.)  No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.  CERTIFICATION  Thereby certify that the information constants have in the base of my knowledge and belief.  Interest of the production Company  Company  SEP 2. Interest of the company of the communitization of the community of the comm	Ctual Footage Lo	cation of	Well:							111		
1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.  2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both us to working interest and royalty).  3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?  Yes No If answer is "so," list the owners and tract descriptions which have actually been consolidated. (I've revenue wide of this form if necessary).  No allowable will be assigned to the well until all interests have been consolidated (the communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.  CERTIFICATION  I hereby certify that the information contained have a large and complete to the beat of my knowledge and befiel.  Name of my knowledge and befiel.  Name of my knowledge ond befiel.	1650	feet fr	om the N	ORTH	line and			ieet	from the	WEST	· · · · · ·	
1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.  2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).  3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?  Yes No If answer is "roya" type of consolidation  If answer is "no." list the owners and tract descriptions which have actually been emasolidated. (The reverse side of this form if necessary.)  No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.  CERTIFICATION  I hereby certify that the information contained where it is not accomplete to the base of my knowledge and belief.  Name  ARRA SUPERITENDENT  Company for the information contained where it is not belief in the information contained where it is not accomplete to the base of my knowledge and belief.  Name  ARRA SUPERITENDENT  Company for the information contained where it is not belief in the information contained where it is not belief in the information contained where it is not belief in the information contained where it is not belief in the information contained where it is not belief in the information contained where it is not belief in the information contained where it is not belief in the information contained where it is not belief in the information contained where it is not belief in the information contained where it is not belief in the information contained where it is not belief in the information contained where it is not belief in the information contained where it is not belief in the information contained where it is not belief in the information contained where it is not belief in the information contained where it is not	fround Level Elev	, F				Pool	1:41Aont				( )e-j1	40
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).  3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?  Yes No If answer is "yes," type of consolidation  If answer is "no," list the owners and tract descriptions which have actually been consolidated. (I'se reverse side of this form if necessary.)  No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.  CERTIFICATION  I hereby certify that the information contained havin is true and complete to the best of my knowledge and basis.  CERTIFICATION  I hereby certify that the information contained havin is true and complete to the best of my knowledge and basis.  CERTIFICATION  Total Mark Community and Company.  Date Surveyed.  SEP 2.7 My  Contained by the private from training and the contained having an experiment of my knowledge and basis of my knowledge and basis of my knowledge and complete to my knowledge and basis of my knowledge and basis of my knowledge and basis of my knowledge and complete to my knowledge and basis of	•					L					L	Actes
Yes	2. If more t	han one ind roya	e lease is lty).	dedicated	to the wel	l, outline	e each and	idei	ntify the o	ownership t	hereol	(both as to working
The state of the set o	dated by Yes If answer this form	is "no if neces	itization,  Io If a  '' list the assay.)	owners and	force-pooli yes;' type o	of consol	which have	e ac	tually be	en consolid	ated.	(Use reverse side of ization, unitization,
Total Surveyed  SEPTEMBER 16, 1971  Both Mark Surveyed  SEPTEMBER 16, 1971  Registered Professional Unitneer and/or Land Surveyer  Cond Surveyed  SEPTEMBER 16, 1971  Registered Professional Unitneer and/or Land Surveyer  Certific Bay All		·	1				1					
Date SEP 2 7 107    INTER & LAND		1	1650'	·						tained he best of n	erein is ny know	true and complete to the
SEP 2 7 107  I CLA THO the well location shown on this playing office of motes 30 and surveys myderations are included motes 30 and surveys myderations are of my knowledge and belief.  Date Surveyed  September 16, 1971  Registered Professional Engineer and/or Land Surveyor  Amabulant  Certification No.	1653	3' —							-	Come		
September 16, 1971  Both Surveyed  September 16, 1971  Registered Professional Engineer and/or Land Surveyor  Certificus No.							1			1	27_	1971
SEPTEMBER 16, 1971  Registered Professional Engineer and/or Land Surveyor  Certificate No.			 			THE PARTY OF THE P	1		SURVEYOP -	under m	OCT.	ologong Plotted from field streets made the same of the same treets the best of my
John WWest -			i i i	•						SEP1 Registered	EMBE	astonal Engineer
Certifuty No. 676			   								John	in West
			7-4						7	Certificati	e No.	676

#### NL , MEXICO OIL CONSERVATION COMMISS . 4

		All distances must be	e from the outer	boundaries of			PE. 80-0	15-20510
rator	DOD!!CT!	ON COMPANY	Lease P	IUrcu	חשת ב	FRACRIE	SIA, OFFICE	#
		ON COMPANY Township	Range	e en	- runty			····· = = = = = = = = = = = = = = = = =
F Secti	11	18 South	2 7	EAST	<u> </u>	EDDY		
al Fontage Location o						14/		
1650 feet	tom the N	ORTH line on		teel	t trin. the	WEST	line Ledicated Access	
nd Level Elev.	Producing Fo	_ //)	Sance !	N DRAW	1- Mad	eow	320	
587 RDB	IIIUK	LOW- (FENN	Wall by and	red pencil a	r hachure	narks on the	e plat below	<del> </del>
2. If more than o interest and ro	ne lease is yalty).	ated to the subject	ell, outline	each and ide	ntify the o	wnership th	ereof (both as	
dated by comm	unitization,	different ownership i unitization, force-po inswer is "yes!" typ	oling. etc?		have the i	nterests of	all owners be	en consoli
If answer is "this form if nec	no," list the	owners and tract de			ctually bee	n consolida	ited. (Use red	erse side of
No allowable w forced-pooling,	وزووو مطالن	ned to the well until	all interests dard unit, eli	have been o	consolidate ch interests	ed (by com s, has been	munitization, approved by t	unitization, he Commis-
sion.			ı I			;	CERTIFICATIO	)N
		}	<b>!</b>			1	certify that the in	
	1	}	. i			1	rein is true and c	
		<b>\</b>	•			Dest of m	y knowledge and l	verrer.
		}	·	i				
	<u> </u>		<del></del>			Nane	ides Colles	.1.
1653' -		}		1		AREA SUP	THECHETHIA	Empine
1000	1	}		1 			roduction C	Combany
	ì	<b>S</b>		 		Amoco P	roduction	,0111pa)
	1			1 		12-	28-72	Z
	1			i				11 !
	1 	}		<b>!</b> 		shown on	certify that the this plat was pla	otted from tre
	i	<b>}</b>		1			actual surveys	
	1	}		I			supervision, and and correct to the	
	1	{		t I		t	ge and belief	==== • • ·
	- +			<del> </del>				
	1	<b>S</b>		0+ 2-Nn		Date Jurve		
	i	Į		1- DIV	<u> </u>		EMBER 16, 1	
	l .	\$		I I-RR	4	1	Professional En-	plineer.
	1	į.		1 2-Hon	V 00		1 .	111
	1	1		1			John WI	Vest
						Certition	670	
330 660 '60	1320 1680	1880 2310 2640	2000 1800	1000	B0Q 0			

SUBMIT IN T LICATE*

(Other instrums on reverse side)

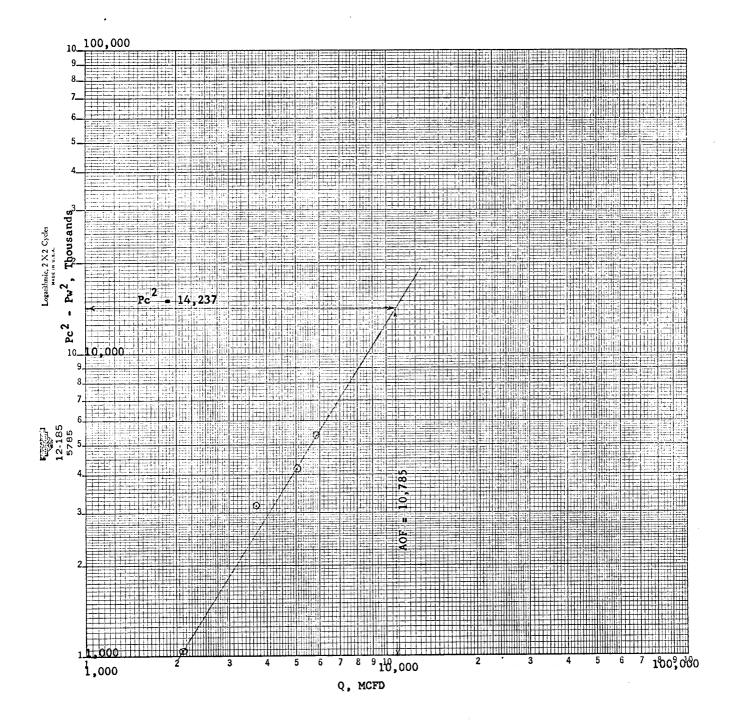
Form approved. Budget Bureau No. 42-R1425.

## UNITED STATES DEPARTMENT OF THE INTERIOR

30-015-20510

	DEPARTMEN	I OF THE INT	EKIOK		5. LEASE DESIGNATION AND SERIAL NO.
	GEOLO	GICAL SURVEY			LC-067858
APPLICATION	FOR PERMIT	TO DRILL, DEE	PEN, OR PLUG	BACK	6. IF INDIAN, ALLOTTEE OF TRIBE NAME
1a. TYPE OF WORK					
DRILL	. 🛚	DEEPEN 🔲	PLUG BA	CK 🗌	7. UNIT AGREEMENT NAME
b. Type of well	L-1	RECEI	VED	LB [7]	8. FARM OR LEASE NAME
WELL WELT			ZONE ZONE	<u> </u>	$\sim$ 0 C
2. "Althoco" Product	ion Company	OCT 8 1	971	1.	9. WELL NO.
3. ADDRESS OF OPERATOR				<u>:</u>	3
BOX 68, HOBBS, N		0. C. C			10. FIELD AND POOL, OR WILDCAT
4. LOCATION OF WELL (Repo	•			<b>\</b> :	WILDCAT
1650 FNL >	x 1653 Fh	1L Sec. 11 (1	F, SE/A NW/A	)	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
At proposed prod. zone	• = •	_		/ p	11 10 00 000
14. DISTANCE IN MILES AND	DIRECTION FROM NEA	REST TOWN OR POST OF	FICE*		12. COUNTY OR PARISH 13. STATE
				£	E DDY NM
15. DISTANCE FROM PROPOSE	D*	16.	NO. OF ACRES IN LEASE		OF ACRES ASSIGNED
LOCATION TO NEAREST PROPERTY OR LEASE LINE (Also to nearest drlg. u	6, FT.			TOT	HIS WELL
18. DISTANCE FROM PROPOSE	ED LOCATION*	19.	PROPOSED DEPTH	20. ROTA	RY OR CARLE TOOLS
TO NEAREST WELL, DRIL OR APPLIED FOR, ON THIS I			10500	K	COTARY
21. BLEVATIONS (Show whether	er DF, RT, GR, etc.)				22. APPROX. DATE WORK WILL START*
				1 1	
23.	1	PROPOSED CASING A	ND CEMENTING PROGR.	AM .	
SIZE OF HOLE	BIZE OF CARING	WEIGHT PER FOOT	SETTING DEPTH	Ι	QUANTITY OF CEMENT
13-34"	11-7/4	42-47	1000'	Cu	ic
	85/8"	24- 36#	, 6200 ·	Fu	u 600 above abo
7/8	5/2 . 4	NER 14-17"	6200-TD	39	ueege behind uner.
·		•	•		
				* 5 E	
				Ş	출장은 수 없는 기원이 되는데
,		. 1	4.1.4		nd evaluations in as necessarion
astır drili	ling will	llogs u	ru be nur	v a	na evaluation
2011 21	ALAN ELIM	a and	a stimu	lati	ng as mecessar
maai, pi	good	7	INP ODATA	11 OT	The state of the s
in attemp	ang co	mmxco			
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,			65 64	
				<b>.0</b>	1 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
				2.	SUMMER SUMM
				-	U. S. GEVEN, MENTS
					U.S. GEOLOGICAL SURVI ARTESIA, NEW MEATON
					luctive zone and proposed new productive
					d and true vertical depths. Give blowout
24.	4				
	-/-		AREA SUPERINTENDENT	rä	10-6-71
SIGNED		TITLE			DATE / CO CI

APPROVED BY CONDITIONS OF APPROVED BY CONDIT



flexa fu

# NEW MEXICO OIL CONSERVATION COMMSSION MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL CEIVED

														JAN	7	
Тур	e Test	Initio	al .	. г	Annual				cial	Test De				JAN	ə 1972	
_		giniti	<u> </u>	<u>_</u>		ection										
1	noco Pro	duct	ion C	omnany		one							ARTESIA C. C.			
Poo				- Curpuity								ARTESIA, DEFEN				
	ildcat					nation Jorrow Penn								No. 30-	015-20510	
	pletion Date			Total Depth			Plug Back	TD	I	Elevati	<u> </u>			r Lease Na		
i	•	•		•								_	34.4	323	Federal	
	2/18/71	Wi.		10,168			10,000			3587	KD	R	MA L	co '%''	rederal	
C 84	Liner 1/2"		_		6277 -		From 9		Te	. 90	29				7/	
15.	-1/2" . Biro	17:	IF	4.892	Set At	138	Perioratio						Unii	X # ₺ 8ec.	Twp. Rge.	
	-3/8"	4.	,	1.995	9504		From Op	an End	T	•			F	11	18S 27E	
		ile - Dro	denhead	1 - G.G. of G.C	Multiple			Pocker 6	et At				County		200	
1 ''	ingle							9	491'				F	ddy		
	ducing Thru		Reserv	rair Temp. °F	Mean /	Innual	Temp. °F			P.			State	,		
	-3/8" Tt		145		6		Ť	1	3.2	•			New	Mexico	)	
	-3/0 10	H	1 143	100	% CO		% N 2	<u> </u>	% H ₂ 8		Pro	ver	Meter		Taps	
	9504	950	4	0.630	0.	•	0.	31	0		1	-	6	,11	Flange	
$\vdash$	2JU4	7,00		OW DATA	<u> </u>					DATA		C/	SING		Duration	
_	Prover		Orifice	Press.	DII	. 1	Temp.	Pres		Топ	p.	Pre		Temp.	of	
NO.	Line Size	×	Size	p.e.i.g.	hw		•F	p.s.1		•F		p.s.		• F	Flow	
SI	0114				<del> </del>			286	2			Pkr			40 hrs	
1.	6.065	x 2.	500	565	5.	3	110	268	9	60		Pkr		-	1 hr	
2.	6.065			560	16.		97	245	٦	60	,	Pkr		-	1 hr	
3.	6.065			590	27.	$\overline{}$	87	222		60	$\overline{}$	Pkr			1 hr	
4.	6.065			600	_36.		81	203		.60		Pkr		-	1 br	
5.	0.003	X	100_	1	<del>- </del>	~										
<u>ٽ</u>				<del> </del>	RA'	E O	FFLOW	CALCU	LATI	ONS						
-			1					Temp.	T	Graviti	,		Super		-t(F)	
	Coellie	cient	-	-√h _w P _m	Pre	eeme		actor		Factor		l .	mpress.	, n	ate of Flow	
NO.	(24 H	our)	-	4W- M	Ì	P _m	m Ft.			Fg		Fac	tor, Fpv		Q, McId	
-	30.31		_	55.34	578	.2 0.9551 1.260					1.0	38	2.0	96		
2	30.31			95.76	573						1.0	41	3.6	578		
3.	30.31			128,79	603	. 2		97.50		1.26	0	1.0	48	5.0	)26	
4.	30.31			148.56	613	. 2				0	1.0	49	5.8	336		
5.									<u> </u>							
	-	T	p. •R	T,	z	Gas	Liquid Hy	drocarbon	Ratio .	74,	136				Mai/bbi.	
NO.	Pt	1 400	71 - 14	'1		A.P	.I. Gravity	of Liquid	Hydrod	arbons		<u>54.</u>	0		Deq.	
1.	0.86	57	<u>o                                     </u>	1.57	0.928		cilic Gravit								XXXXXX	
2.	0.85	55	7	1.53	0.922	Spec	cilic Gravil	y Flowing	Fluid		X	XXXX			570	
3.	0.90	54	$\overline{}$	1.50	0.911		ical Press		673				P.S.I		670P.S.I.A.	
4.	0.91	54	1	1,49	0.908	Crit	ical Tempe	rature	364					.n	381 n	
5		1	إحجيا			<u> </u>										
k Fc	3773.2		14,2		x	٠	P _C 2	_	2.6	61		<i>,</i> ,,Γ	₽²	٦٠.	1.848	
2	P, 2	<b>↓</b> •	<u>`</u>	P _w ²	$P_c^2 - P_w^2$	100	R2 _ p7	· ·	<u> </u>		•	(2)	₽ ² – ₽	- I		
1		363	2.8	13,197	1,040		-6 - ·W					, <b>L</b>	- "	- ·		
2			0.2	11,090	3,147	4	٦	<b>- 2</b>	٦,							
3			3.2	10,069	4,168	AOF	F=0 -		-1"	=(	<i>)</i> . / è	2				
4		298	1.1	8,887	5,350	4	L	P P.	٦.							
5						<b>1</b>			т —							
Aba	olute Open i			10,785				e 15.025		le of Sic	<b>pe</b> ⊕			Slope	0.626	
Ren	narks:*	Pc m	easur	ed with	bottom	hole	press	ure re	cord	er						
Г																
App	coved By Co	mmissi	on:		-			Calculat				i	Checke	•		
Approved By Commission: Conducted By: Calcular												1	72.3	Snook		

## REQUEST FOR THE EXTENSION OF AN EXISTING POOL

OR

### THE CREATION OF A NEW POOL

O: The Oil Conservation Commission		Date	19./K
State of New Mexico			
		۸۸ " <u>~</u> "	d .
Amoco Production Company BOX 68	, HOBBS, N. M. 88240	MALCO S:	teaeral
Name of Operator		Trailie of De	
Located 1650 feet from	the NORTH	li	ne and 1653 feet
Well No.	. 1	10 6	DTE
rom the WEST line of		18-0	W-E
on me	Section	Township	Range
ith on form C-105, we hereby request that the cool be extended to include the following described that a new pool be created to include the following described that a new pool be created to include the following described that a new pool be created to include the following described that a new pool be created to include the following described that a new pool be created to include the following described that a new pool be created to include the following described that a new pool be created to include the following described that the cool be extended to include the following described that the cool be extended to include the following described that the cool be extended to include the following described that a new pool be created to include the following described that a new pool be created to include the following described that a new pool be created to include the following described that a new pool be created to include the following described that a new pool be created to include the following described that a new pool be created to include the following described that a new pool be created to include the following described that a new pool be created to include the following described that the cool of th	i area	SEC.11,7	T-18-5, R-27-E
•	Alliaco i rodao	Operator	
	C . L	·	
Name of Producing Formation:			
		-	
MORROW- FENN	AREA SUPERINTENDENT	Representative	:
	.70		
	Nece		REDELL
$= a \left( \frac{1}{2} \right)^{-1}$	Mole		RECEIVED
429 New 1			FEB 1 4 1972
NMOCC- ART Ryging Trus  Dir  W.7  W.7  Howns	Mili		FEB 1 4 1972

Amoco Production Company -2-

COMMINGLING ORDER PLC-43 (con'd)

DONE at Santa Fe, New Mexico, on this 6th day of April, 1972.

A. L. PORTER, Jr. Secretary-Director

ALP/DSN/dr

CC: Oil Conservation Commission - Artesia
Oil & Gas Engineering Committee - Hobbs
United States Geological Survey - Roswell



#### OIL CONSERVATION COMMISSION

**GOVERNOR** BRUCE KLAC CHAIRMAN

LAND COMMISSIONER -ALEX J. ARMIJO

MEMBER

STATE GEOLOGIST A. L. PORTER, JR.

SECRETARY - DIRECTOR

87501

April 6, 1972

APR 7 1972

O. C. C. ARTESIA, OFFICE

STATE OF NEW MEXICO P. O. BOX 2088 - SANTA FREE EIVED

Amoco Production Company P. O. Box 68 Hobbs, New Mexico 88240

Attention: Mr. V. E. Staley

COMMINGLING ORDER PLC-43

#### Gentlemen:

The above-named company is hereby authorized to commingle Empire Abo oil and undesignated Morrow gas pool distillate pool production from the following leases:

Lease Name	Acreage Description
Malco H Federal R/A A	NE/4 SE/4 Sec. 3-18-27
Malco D Federal R/A A	N/2 NE/4 Sec. 10-18-27
Malco D Federal R/A L	S/2 NE/4 Sec. 10-13-27
Malco E Federal R/A A	SE/4 SE/4 Sec. 3-18-27
Malco E Federal R/A B	SW/4 SE/4 Sec. 3-18-27
Malco A Federal	E/2 NW/4 Sec. 11-18-27
Malco B Federal	W/2 NW/4 Sec. 11-18-27
Malco C Federal	W/2 NE/4 Sec. 11-18-27
Malco J Federal	E/2 NE/4 Sec. 11-18-27

Production shall be allocated by separately metering the oil production from each of the above leases and separately metering the distillate production from the Malco "S" Federal Well No. 1 prior to commingling.

This installation shall be installed and operated in accordance with the applicable provisions of Rule 309-B of the Commission Rules and Regulations and the Commission "Manual for the Installation and Operation of Commingling Facilities." It is the responsibility of the producer to notify the transporter of this commingling authority.

Commission Order No. R-1399, which authorized commingling of all of the above production except the Morrow distillate, is hereby put in abeyance.

#### NEW MEXICO OIL CONSERVATION COMMISSION

Artesia, New Mexico

May 9, 1972

Amoco Production Company P. O. Box 68 Hobbs, New Mexico 88240

Re: Wells placed in pools

#### Gentlemen:

As the result of Commission Order <u>P-4291</u> the following described well (a) (has-kare) been placed in the pool (a) shown below. This change in nomenclature has been made in our files. Please change your records to reflect the proper pool name. All subsequent reports must show this nomenclature until further notice.

Scoggin Draw Morrow
Malco "S" Federal #1-F, 11-18-27

Transporters are advised, by copy of this letter, to change their records to reflect the pool name as established by this order.

Very truly yours,

OIL CONSERVATION COMMISSION

Dist.
Orig. Operator

cc: Each transporter



Amoco Production Company Post Office Box 68 Hobbs, New Mexico, 88240

March 19, 1973

File: VES-86-680 x WF

Re: Back Pressure Test

Amoco's Malco "S" Federal No. 1

F-11-18-27

Eddy County, New Mexico

RESTIVED

MAR 20 1973

ARTICLE, OFFICE

New Mexico Oil Conservation Commission P. O. Drawer DD Artesia, New Mexico, 88210

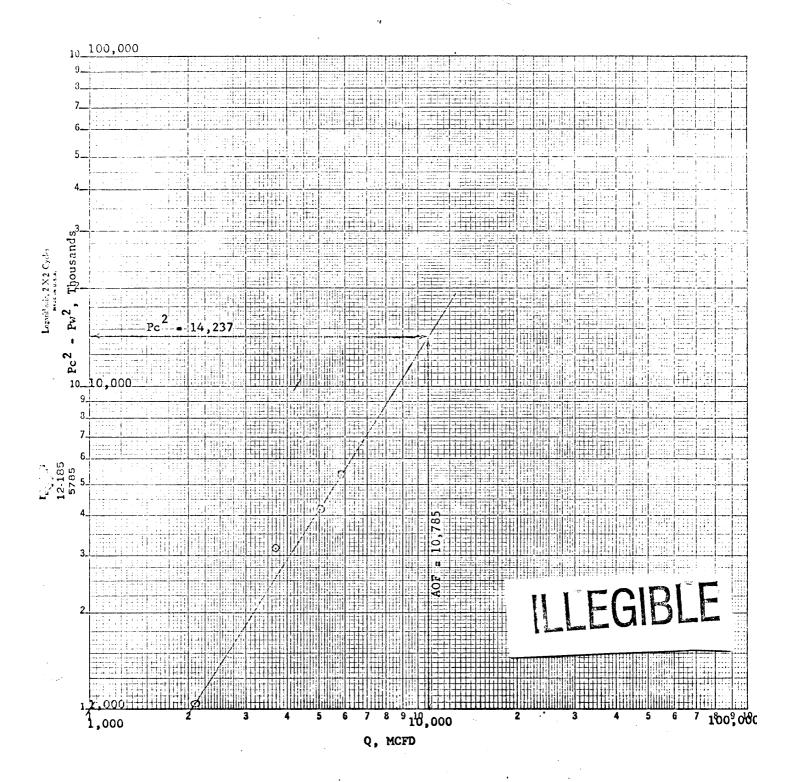
#### Gentlemen:

Attached herewith is a One Point Back Pressure Test on Amoco's Malco "S" Federal No. 1, F-11-18-27, Eddy County, New Mexico. Due to a drastic decline in reservoir pressure and low producing rates, it was not feasible to take a Four Point test on this well and the One Point test submitted is based on the maximum flow rate at existing sales line pressures and the slope of the original Four Point test submitted December 28, 1971. As can be seen from the reservoir pressure and cumulative production of 104 MMCF to the last test period, the well is on a rapid decline. We trust these data will fill your requirements for a back pressure test.

Yours very truly,

V. E. STALEY Area Superintendent

Attachments



# EW MEXICO OIL CONSERVATION CC SSION MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL RECEIVED

Typ	Test	_						·			Test Dat	•	MAR 2 0 1973				
	<u> </u>	Initia	1		A	nnual		Special 12/22/71					141/ (IX 2: 0 10/0				
	ipany ายอาริชก	ducti	on C	ompany			ection DTIQ							0. 0. 0.			
Poc	i 1deat	. ,				Forma	orrow Penn					Unit	Unit API No. 30-(13-2/510)				
	pletion Date		· · ·	Total Depth	·	1 110		Plug Back	TD		Elevation			Legge N		2-22- 12.Vs	
1	1/1 1/71	=	- 1	10,168				10,600			3587			_		lama1	
_	ElWar	Wi.		d		77.		Perforation			3307	Nato	Well No	o ''S"		ESTELL .	
5.	-1/2" . Dizo	17#		4.872	. [	10.1	33	From 90		т	• 992	9	<u> </u>	1			
				•		At -		Perioration			·			Bec.	Twp	•	
	-3/3" • Well = 8inu	4.7		1.995		504		From Opc	Pocker 6		<u>,</u>		County	11	1.39	3 27E	
	n ;la			- 0.0. 0. 0.	O. 1410					49 <b>1</b>			1	ી <b>ં</b>			
	ducing Thru		Reserv	rolf Temp. *F		Mean Ar	nnual	Temp. °F	Baro. Pr		· Pa		State		-		
2.	-3/3" To	3l	145	9775		60			1:	3.2			17317	to other	•		
	, L	н		Gq		% CO 2		* N 2		% H ₂ 8	3	Prover	Meter	Run	Tap	•	
	98.3	9504		- 0.630	_	0.3	3	0.3		0			6.		610	ומיים	
-	Prover			OW DATA	<del>\                                    </del>						DATA		ASING C			Duration	
NO.	Line	X	Orifice Size	Press.	ı	Diff.		Temp.	Pres p.s.i		Temp		.i.q.	Temp.		of Flow	
SI	OILV								256	2	1	Pice			7	Q hrs	
1.	6.635	× 2.5	00	565		5.3		110	<b>2</b> 639	)	60	Plex		-		1 hr	
2.	6.655			560		15.0		97	245		60	Pkr				1 hr	
3.	6.03			590		27.5		87	222		60	Pkr				hr	
5.	6.(15	· 2.5	<u> </u>	600	-	35.0	-	81	203	5	60	Pier	<del></del>		- 1	<u>br</u>	
<u>ٿ</u>				·		RATI	 E OI	FLOW	CALCU	LATI	ONS						
	Coeffic	-11	Τ						Temp.		Gravity		Super	Π.	)	f Flow	
NO.	(24 He		-	-Vh _w P _m	•	Presi		1	actor		Factor	t t	mpress.	'	Q, N		
	30.31		<del> </del>	55,34		573.2			FI.	<del> </del>	Fq		clor, Fpv				
2	36.31		-	95.76		573.		0.9	662	┼	1,260			2.4	<i>196</i> 378		
3	35.31		1	128.79	$\dashv$	603.			750	†	1,250			_	)26		
4.	30.31			143.55		613.			004		1,260			5.8			
5.			L_														
NO.	P _t	Temp	. •A	Tr		z		Liquid Hyd			-		6			_ Mai/bbi.	
1	0.05	570		1.57	G	923		I. Gravity				. 54 <b>.</b>	U	T		Deg.	
2.	6. 35	557		1.53		922		ilic Gravit				XXXX	<del></del>	C.		XXXX	
3.	6.43	567		1.50		911		ical Preseu					P.8.1.		70	P.S.I.A.	
4.	Oalis	541		1.49	υ.	,903	Criti	ical Temper	rature	364			I		81		
5	3773.2	F. 2	10,2	37												<del></del>	
P _C	P. 2	Pw		R _w ²	P.2	- R _w ²	(1)	P _C 2	• _	2.6	61	(2)	թ² թ² – թ²	]"	1.3	48	
1		3632		13,197		040		₽² - ₽?					$R^2 - R^2$	] -			
2		3330		11,090	3.	147		_		_							
3		3173.		10,069	4,	168	AOF	-0 -	₽²	_]" _{',}	10,	785					
5		2981	.1	<b>8,</b> €3 <b>7</b>	5,	350		L	Pc2 - Ry2								
4	olute Open F	low		10,735				Make 4	15.025	Anc	e of Slope			SIS-	0	.625	
	74		sur	ed with	2055	on he	10							siopi	. "-		
Rem	emorks: Wis measured with bottom hole pressure recorder																
Арр	roved By Co	mmission	1	Conduct	-				Calculate	-			Checked	Byı			
				I Al	Kla	122			Ed s	Spoo	k		EA S	lnook			

# HO. OF COMICS RECEIVED DISTRIBUTION SANTA FE FILE U.S.G.S. LAND OFFICE IRANSPORTER GAS OPERATOR /

## NEW MEXICO OIL CONSERVATION COMM. :ON REQUEST FOR ALLOWABLE

Form C-104 Supersedes Old C-104 and C-110 Effective 1-1-65

AND
AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

L	U.S.G.S.	AUTHORIZATION TO TRAI	NSPURT OIL AND NATURAL G	AS			
	LAND OFFICE						
	TRANSPORTER GAS /	. F	RECEIVED				
ı. [	OPERATOR / PRORATION OFFICE		SEP 1 3 1976				
	AMOCO PRODUCTION COMPANY						
		COMPANT					
	Address	.c 70226	ARTESIA, OFFICE				
	P.O. DRAWER A, LEVELLAND, TEXA	(2 13330	Other (Please explain)	9 -1-76			
- 1	Reason(s) for filing (Check proper box)	Change in Transporter of:		DUCTION COMPANY			
- 1	New Well	Oil Dry Gas					
- 1	Recompletion Change in Ownership	Casinghead Gas Condens	sate To: GAS COMPA	ANY of NEW MEXICO			
L	Change in Ownership						
	f change of ownership give name nd address of previous owner						
	DESCRIPTION OF WELL AND L	EASE   Well No.   Pool Name, Including Fo	ormation (Kind of Lease	Lease Nc.			
	MALCO "S" FEDERAL Location	1 Scoggin Dram	Y- MORROW State, Federa	OFFER FEDERAL LC-047858			
	Unit Letter F; 165	O Feet From The NORTH Line	e and 1653 Feet From "	The WEST			
	Line of Section // Town	18-5 Range	27-E , NMPM, E	DOY County			
<b>(1</b> . ]	DESIGNATION OF TRANSPORT Name of Authorized Transporter of Oil	ER OF OIL AND NATURAL GA	Address (Give duciess to witten appro				
1	AMOCO PRODUCTION CO		Box 1183 · Houston, Address (Give address to which appro	TEXAS 7700/ ved copy of this form is to be sent)			
Ì	GAS COMPANY OF N		FIRST INTERNATIONAL	BLdq. DALLAS, TX 75270			
}		Unit Sec. Twp. P.ge.	Is gas actually connected? Wh	en			
	If well produces oil or liquids, give location of tanks.	F 11 18 27	YES	12-27-72			
	f this production is commingled with COMPLETION DATA	h that from any other lease or pool,	give commingling order number:  New Well Workover Deepen	Plug Back   Same Resty. Diff. Resty.			
	Designate Type of Completio						
	Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.			
	Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth			
	Perforations Depth Casing Shoe						
		TURING, CASING, AND	CEMENTING RECORD				
	HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT			
	HOLE SIZE						
			<u> </u>				
v.	TEST DATA AND REQUEST FO	OR ALLOWABLE (Test must be a	I lifter recovery of total volume of load oil epth or be for full 24 hours)	l and must be equal to or exceed top allow-			
	OII, WELL  Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas l	ift, etc.)			
	Length of Test	Tubing Pressure	Casing Pressure	Choke Size			
	Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF			
	GAS WELL			10-11-16			
	Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate			
	Testing Method (pitot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Choke Size			
VI.	CERTIFICATE OF COMPLIAN	CE	1	ATION COMMISSION			
			APPROVED SEP 14	1976			
		regulations of the Oil Conservation with and that the information given e best of my knowledge and belief.	71/1	rossett			
	above is tide and complete to the		TITLESUPERVISOR	DISTRICT II			

054-NM OCC- ART Administrative Assistant 1- DIV 1-1MG (Title) 1-Hondo 9-3-76 (Dute) 1-. Susp . 1-RL  This form is to be filed in compliance with RULE 1104.

If this is a request for sllowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply completed were.

NO. OF CUPIES RECI	15		
DISTRIBUTION			
SANTA FÉ		1	
FILE		1	V
U.\$.G.S.			
LAND OFFICE			
TRANSPORTER GAS		1	
		1	
OPERATOR		1	

#### NEW MEXICO OIL CONSERVATION COMMIS. N REQUEST FOR ALLOWABLE AND

Form C-104 Supersedes Old C-104 and C-110 Effective 1-1-65

AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

#### RECEIVED

OPERATOR	, · · · ·					
PRORATION OFFICE						
perator	J.	N 28 1977				
AMOCO PRODUCTION COMPANY						
Address D. C. C.						
P.O. Drawer A, Levelland	1. lexas /9330	TOTAL DESIGN	ff. 8-1-76			
Reason(s) for filing (Check proper box)		Other (Please explain)	11. 0-1-70			
New We!1	Change in Transporter of:	V From Cas Compan	y of Nov Maying			
Recompletion	Oil Dry Gas		y of New Mexico			
Shange in Ownership	Casinghead Gas Condens	sate   To: Amoco Prod	uciton Company			
if change of ownership give name and address of previous owner						
DESCRIPTION OF WELL AND I	DESCRIPTION OF WELL AND LEASE  Lease Name  Well No. Pool Name, Including Formation  Kind of Lease  Lease No.					
Malco "S" Federal	1   Scoggin Draw-	18. William	or Fee Federal LC-067858			
_ocation	1 Scogg III DI aw	-110110W0	1 Edel 41   EC-007050			
=	550 Feet From The North Line	e and 1653 Feet From 1	rhe_West			
Line of Section 11 Tow	mship 18-S Range 27	7-E , ммрм, <b>Ed</b> d	<b>y</b> County			
		_				
DESIGNATION OF TRANSPORT	or Condensate X	Address (Give address to which appro-	ned conv of this form is to be sent)			
Name of Authorized Transporter of Oil		·				
Amoco Production Compa	iny - Irucks	Box 1183, Houston, Tex Address (Give address to which appro-	as //UU1			
Name of Authorized Transporter of Cas		!	i i			
Amoco Production Compa		P.O. Drawer A, Levellan Is gas actually connected? Who				
If well produces oil or liquids,	Unit Sec. Twp. Rge.		12-27-72			
give location of tanks.	F 11 18 27	Yes	12-27-72			
:f this production is commingled wit	th that from any other lease or pool,					
Designate Type of Completion	on - (X)   Oil Well   Gas Well	New Well Workover Deepen	Plug Back Same Restv. Diff. Restv.			
Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.T.D.			
Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation	Top Oil/Gas Pay	Tubing Depth			
Ferforations			Depth Casing Shoe			
			<u> </u>			
		CEMENTING RECORD				
HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT			
	<del></del>		+			
			<u> </u>			
TEST DATA AND REQUEST FOR ALLOWABLE OIL WELL  (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours)						
Late First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas li	jt, etc.)			
Length of Test	Tubing Pressure	Casing Pressure	Choke Size			
Actual Prod. During Test	Oil-Bbls.	Water-Bbls.	Gas-MCF G			
Actual Prod. During 1981	0		1 2000			
GAS WELL						
Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate			
		6 + 5 - (6) wh-42)	Choke Size			
Testing Method (pitot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Shut-in)	Chore Size			
CERTIFICATE OF COMPLIANCE OIL CONSERVATION COMMISSION						
CERTIFICATE OF COMPLIAN	~ <b>~</b>		0.1.10			
	regulations of the Oil Conservation	APPROVED JAN 31 197	, 19			
Commission have been complied t	with and that the information given	110 20	essett			
above is true and complete to the	e best of my knowledge and belief.	BY W.A. Harris				
		TITLE				
		11166				

(Signature) / Administrative Assistant (Title) 1-26-77 084 NMOCC-Art (Date) 1-Div 1-Hondo 1-Susp 1-RC

1-JMG

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply completed wells.

li

# UNITED STATES GOALDS GOALDS GOALDS

	Budget Bureau	No. 42	-R1424
LEASE			٠.
C 0C70E0			

OMILD SIXILS	5. LEASE
DEPARTMENT OF THE INTERIOR	LC-067858
C/SE GEOLOGICAL SURVEY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
SUNDRY NOTICES AND REPORTS ON WELLS  (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir, Use Form 9–331–C for such proposals.)	7. UNIT AGREEMENT NAME DEC 29 1 31
1 oil gas	8. FARM OR LEASE NAME COMMENTED TO THE MAIL OF THE MAI
well well well other  2. NAME OF OPERATOR	9. WELL NO.
Amoco Production Company	10. FIELD OR WILDCAT NAME
3. ADDRESS OF OPERATOR	Scoggin Draw - Morrow Gas
P. O. Box 68, Hobbs, NM 88240	11. SEC., T., R., M., OR BLK. AND SURVEY OR
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17	AREA
below)	11-18-27
AT SURFACE: 1650' FNL X 1653' FWL, Unit F	12. COUNTY OR PARISH 13. STATE
AT TOP PROD. INTERVAL: Sec. 11, T-18-S, R-27-E AT TOTAL DEPTH:	Eddy NM
	14. API NO.
<ol> <li>CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</li> </ol>	
NEI ONLY ON OTHER BINN	15. ELEVATIONS (SHOW DF, KDB, AND WD)
REQUEST FOR APPROVAL TO: SUBSEQUENT	3587 ' RDB
TEST WATER SHUT-OFF     U/S/G/S/E	
FRACTURE TREAT SHOOT OR ACIDIZE	an and the second secon
<u> </u>	1960 TE: Report results of multiple completion or zone
PULL OR ALTER CASING	change on Form 9–330.)
MULTIPLE COMPLETE	3.17
H U.S. GEOLOGIC	AL SHOVEY
(other) ROSWELL, NEW	/ MEXICO
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state including estimated date of starting any proposed work. If well is di	e all pertinent details, and give pertinent dates,
measured and true vertical depths for all markers and zones pertinen	t to this work.)*
Propose to acidize to increase production as	follows: Install Tree Saver.
Acidize with 8000 gal. 7-1/2% HCL NEFE acid s	taged with 150 ball sealers
at a rate of 3-5 BPM as follows: (a) Run ga 2000 gal. of acid; (c) inject 25 ball sealers	inna ray-temp base log; (b) Pump
(e) Repeat (c) and (d) until all acid is pum	ned: (f) Flush with 37 hbl
of treated 2% KCL water; (g) Run after job gai	mma rav-temp treatment evaluation
log; and (h) Swab back to recover load. Place	e well back on production.
,	
0+4- USGS, A 1-Hou 1-Susp 1-CLF	
T-nou T-susp T-cel	1
·	
Subsurface Safety Valve: Manu. and Type	Set @ Ft.
18. I hereby certify that the foregoing is true and correct	
SIGNED Cathy J. Jorman TITLE Ast. Adm. Ana	lyst DATE 12-21-81
(This space for Federal or State offi	ce use)
APPROVED BY TITLE	DATE
CONDITIONS OF APPROVAL, IF ANY:	DEC 2 8 1981
	20000

*See Instructions on Reverse Side

JAMES A. GILLHAM
DISTRICT SUPERVISOR

NM OIL CON COMMISSION Drawer DD

Artesia, NM 88210

Form 9-331 Form Approved. Dec. 1973 Budget Bureau No. 42-R1424 RECEIVED UNITED STATES 5. LEASE DEPARTMENT OF THE INTERIOR LC-067858 GEOLOGICAL SURVEYDEC 6. IF INDIAN, ALLOTTEE OR TRIBE NAME 7. UNIT AGREEMENT NAME SUNDRY NOTICES AND REPORTSOON WELLS (Do not use this form for proposals to drill or to deepen party pack to a different reservoir. Use Form 9-331-C for such proposals.) 8. FARM OR LEASE NAME Malco "S" Federal 1. oil well X other well 9. WELL NO. 2. NAME OF OPERATOR
Amoco Production Company L 1 10. FIELD OR WILDCAT NAME 3. ADDRESS OF OPERATOR Scoggin Draw Morrow Gas P. O. Box 68, Hobbs, NM 11. SEC., T., R., M., OR BLK. AND SURVEY OR **AREA** 4. LOCATION OF WELL (REPORT LOCATION CLEARLY, See space 17 11-18-27 below.) AT SURFACE: 1650' FNL X 1653' FWL, Unit F 12. COUNTY OR PARISH 13. STATE AT TOP PROD. INTERVAL: Sec. 11, T-18-S, R-27-E Eddy AT TOTAL DEPTH: 14. API NO. 16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 15. ELEVATIONS (SHOW DF, KDB, AND WD) 3587 RDB REQUEST FOR APPROVAL TO: SUBSEQU TEST WATER SHUT-OFF FRACTURE TREAT X SHOOT OR ACIDIZE REPAIR WELL Report results of multiple completion or zone PULL OR ALTER CASING DEC 3 1982 change on Form 9-330.) MULTIPLE COMPLETE CHANGE ZONES OIL & GAS ABANDON* MINERALS MOMT. SERVICE (other) ROSWELL, NEW MEXICO 17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)* Propose to fracture stimulate Morrow interval 9621'-9929' (non-continuous) as follows: Pull tubing and packer. Set a packer at apx. 9520'. Fracture stimulate with 20000 gal 40# gelled 2% KCl water commingled with 10000 gal CO2 carrying 20500# 20/40 sand. Flush with 3000 gal 2% KCl brine water and 1000 gal CO2. Flow and kick off well. If well won't flow, pull packer and run 3 joints tubing as tailpipe with 1.81" profile nipple 1 joint off bottom, landing tubing at apx. 9530'. Set a packer in  $5\frac{1}{2}$ " liner at apx. 9430'. Run on-off tool with 1.875" profile nipple in seal mandrel. Run 2-3/8" tubing to surface and hydro test tubing. Flow test and return well to production. 0+4-MMS.A 1-H0U 1-SUSP 1-CLF Subsurface Safety Valve: Manu. and Type ___ _ Set @ _____ Ft. 18. I hereby certify that the foregoing is true and correct SIGNED (11) 2020 r TITLE Ast. Adm. Analyst DATE 11-30-82 APPROVED (This space for Federal or State office use) APPROVED BY. Sgd.) PETER W. CHESTER TITLE DATE CONDITIONS OF APPROVAL, IF ANY: DEC 8 1982 FOR JAMES A. GILLHAM ee Instructions on Reverse Side

DISTRICT SUPERVISOR

RECEIVED BY					2
250 3160-3. (November 1983)	oons. commission	•	SUBMIT IN (Other inst		Form approved. Budget Bureau No. 1004-013
ANTI 9-BOCK	דואט בן בי	ED STATES	reverse	e side)	Expires August 31, 1985
Artesia	DEBARTMENT	OF THE INT	ERIOR		5. LEASE DESIGNATION AND SERIAL NO.
O. C. D.	BUREAU OF	LAND MANAGE	<b>AENT</b>		LC-067858
ALLEND REACTION	<del></del>			D.A.CI	6. IF INDIAN, ALLOTTER OR TRIBE NAME
la. TYPE OF WORK	LFOR PERMIT	O DRILL, DE	EPEN, OR PLUG	BACK	The state of the s
DRI b. Type of well	LL 🗆	DEEPEN [	PLUG BA	ACK 🗌	7. UNIT AGREEMENT NAME
	AS OTHER 7	Recomplete	SINGLE MULT	TIPLE	8. FARM OR LEASE NAME
2. NAME OF OPERATOR	2.1 1.1		•		Molco S Federal
MACO //  3. ADDRESS OF OPERATOR	rodución Co.	mpany /			9. WELL NO.
P.O Box	68 Holder MI	M 88240			10. FIELD AND POOL OR WILDSAT
LOCATION OF WELL (Re	eport location clearly and	in accordance with a	ny State requirements.*)		Challe Blood Wolfcamo
At surface	1650' FNLX 1	653 FWL	•		11. SEC., T., R., O., OR BLE
At proposed prod. zon	e (SE/4 NW/4	Writ F)			AND SURVEY OR AREA
					11-18-27
4. DISTANCE IN MILES A	IND DIRECTION FROM NEAR	EEST TOWN OR POST O	FICE*		12. COUNTY OR PARISH 13. STATE
5. DISTANCE FROM PROPO	sen*	1 4	NO OR AODES TO THE	1 17	Eddy nm
LOCATION TO NEAREST PROPERTY OR LEASE L	INE, FT.	1	. NO. OF ACRES IN LEASE	17. NO. 6	OF ACRES ASSIGNED HIS WELL
(Also to nearest drig	. unit line, if any)		. PROPOSED DEPTH	20 205	40 RY OR CABLE TOOLS
TO NEAREST WELL, DE OR APPLIED FOR, ON THE	RILLING, COMPLETED,		,		an
21. ELEVATIONS (Show whe		1	7610'	1 /104	22. APPROX. DATE WORK WILL START
3587	RDB				
	nuu				ł
3.		ROPOSED CASING	AND CEMENTING PROG	RAM	
SIZE OF HOLE	P			RAM	OPANTITY OF CEMENT
SIZE OF HOLE		ROPOSED CASING WEIGHT PER FOOT	SETTING DEPTH		QUANTITY OF CEMENT
	P	WEIGHT PER FOOT		5	70 Mg
SIZE OF HOLE	8IZE OF CASING  // 3/4"  8 5/6"	WEIGHT PER FOOT	8ETTING DEPTH  / 000' 6348'	5	70 Ms 300 Aso
SIZE OF HOLE  15" 11" 7%"  pose to alana	SIZE OF CASING  11 1/4"  8 5/6"  5/2" Liner  On the Morrow	weight per foot  47#  32#  17#  of and recon	SETTING DEPTH  /000' 6348' 6277-/0/38'	5	70 Mg
pose to abara  with product  I Hand set of  9490'.	size of Casing  11 1/4"  8 1/8"  51/2" liner  fon the Morrow  tion equipment  LIBP at 9500  (25 ex) Class	weight per foot  47#  32#  17#  2 and recon  and cap a	SETTING DEPTH 1000' 6348' 6277-10138' splete to the h	5 (s) class	170 sto 300 sto 355 sto 6 00 follows: 10 H' neat cont. Top of M
size of Hole  15"  11"  128"  Prose to abara  with product  I hand set of  49490'.  Jun CBL for  there is not a  NABOVE SPACE DESCRIBE  one. If proposal is to  reventer program, if any  there will proposal is to  reventer program, if any  there will be any  th	SIZE OF CASING  11 14"  878"  51/2" liner  Ion the Morrow  tion equipment  2TBP at 9500  (25 px) class  20m 7500-65  good cmt. b  PROPOSED PROGRAM: If pairill or deepen directional	WEIGHT PER FOOT  47#  32#  17#  2 and recon  and cap a  4 h neat p  600.  Fond between	SETTING DEPTH 1000' 6348' 6277-10/38' splete to the highest from 78 en 7000'-740 or plug back, give data on	Solfan,  Solast  Class  o'a suppresent prod	170 sto 300 sto 355 sto 6 00 follows: 10 H' neat cont. Top of M
SIZE OF HOLE  15"  11"  17%"  17%"  Prose to abana  With product  I hand set (  4 9490'.  Pool a 250' (  Sun CBL for  I there is not a  No ABOVE SPACE DESCRIBE ONE. If proposal is to coreventer program, if any  (This space for Feder  (This space for Feder	SIZE OF CASING  11 14"  878"  51/2" liner  Ion the Morrow  tion equipment  2TBP at 9500  (25 px) class  20m 7500-65  good cmt. b  PROPOSED PROGRAM: If pairill or deepen directional	WEIGHT PER FOOT  47#  32#  17#  2 and recon  and cap a  4 h neat p  600.  Fond between	SETTING DEPTH 1000' 6348' 6277-10/38' splete to the highest from 78 en 7000'-740 or plug back, give data on	Solfan,  Solast  Class  o'a suppresent prod	300 sto 300 sto 300 sto 355 sta 600 follows:  "H' nest cont. Top of M  10. × Place mud betwee  splemental procedure  succeive some and proposed new productive
size of Hole  15"  11"  128"  Prose to abara  with product  I hand set of  49490'.  Jun CBL for  there is not a  NABOVE SPACE DESCRIBE  one. If proposal is to  reventer program, if any  there will proposal is to  reventer program, if any  there will be any  th	SIZE OF CASING  11 14"  878"  51/2" liner  Ion the Morrow  tion equipment  2TBP at 9500  (25 px) class  20m 7500-65  good cmt. b  PROPOSED PROGRAM: If pairill or deepen directional	WEIGHT PER FOOT  47#  32#  17#  2 and recon  and cap a  4 h neat p  600.  Fond between	SETTING DEPTH 1000' 6348' 6277-10/38' splete to the highest from 78 en 7000'-740 or plug back, give data on	Solfan,  Solast  Class  o'a suppresent prod	300 sto 300 sto 300 sto 355 sta 600 follows:  "H' nest cont. Top of M  10. × Place mud betwee  splemental procedure  succeive some and proposed new productive
SIZE OF HOLE  15"  11"  17%"  17%"  Prose to abana  With product  I hand set (  4 9490'.  Pool a 250' (  Sun CBL for  I there is not a  No ABOVE SPACE DESCRIBE ONE. If proposal is to coreventer program, if any  (This space for Feder  (This space for Feder	SIZE OF CASING  11 14"  878"  51/2" liner  Ion the Morrow  tion equipment  2TBP at 9500  (25 px) class  20m 7500-65  good cmt. b  PROPOSED PROGRAM: If pairill or deepen directional	WEIGHT PER FOOT  47#  32#  17#  2 and recon  and cap a  4 h neat p  600.  Fond between	SETTING DEPTH  1000' 6348' 6277-10/38'  splete to the h  will 35' (5 mg  len 7000'-740  or plug back, give data on ta on subsurface locations  Asst. Almin. (	Solfan,  Sol	300 sto 300 sto 300 sto 355 sta 600 follows:  "H' nest cont. Top of M  10. × Place mud betwee  splemental procedure  succeive some and proposed new productive

#### *See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, 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.

place cont behind pipe will be issued. W/4 DPJSPF using a 3/6"gun. 7046-62, 7090 - 7/00, and 7382-88 D RIH with RBP, the , and pler. Set RBP at 7450's pler. at 7280'. 8 Swob and flow test well De Stimulate Wolfcamp 7382-88' with 1000 gals 1570 NEFE Hel gelled acid W/add. and 1000 gals nongelled 15th NEFE Hel W/add. Flish with 30 bblo fresh water.

( ) Swab and flow test well W Release phr, lower and latch onto RBP. Pullup RBP to 7200' and spot 10" sand on Top. Set phr at 6850. (13) Stimulate Wolfcamp 7046-62' and 7090-7100' as follows: * Tag all acid w/RA material a) Run before treatment GR Temp survey 7/70-6800 b) Pump 4000 gals 15% NEFE HCl gelled acid w/add in 2 equal stages c) Pump 1000 gals 15% NEFE HCl acid w/add D) flush acid with 29 bbls fresh water e) Run after treatment survey 7170-6800 (4) Swob and flow test well (3) Release plar and POH with RBP, plar, and they.

(6) RIH with 236" they with seating night on bottom. Land they at 7450' and anchor at 7350' 1) Run rods and pump and return well to production.

## W MEXICO OIL CONSERVATION COMMI ON WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C+102 Supersedes C+128 Effective 1-1-65

All distances must be from the outer houndaries of the Section Well No. ompar Actual Footage Location of Well: North West 1650 1653 line and Ground Level Elev Dedicated Acreage: 3587 1. Outline the acreage descreted to the subject well by colored perfeit or habiture marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc? If answer is "yes;" type of consolidation _ Yes ∏ No If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)_ No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commis-CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. 1650 1653 I hereby certify that the well location shown on this plat was platted from field notes of actual surveys made by me ar under my supervision, and that the same is true and correct to the best of my knowledge and belief. Date Surveyed Registered Professional Engineer and/or Land Surveyor Certificate No.

1000

1320 1650

1980 2310

-	REW 2037	
	MARINER	
	C. C. D. ARTESIA, OFFICE	
	Farmere	

#### STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT

**. ** (***** ***		1	
DISTRIBUTI	0 4	+	
BANTAFE		V	1.
PILE		V	
U.B.O.S.		1	
LAND OFFICE		1-	_
TRANSPORTER	CIL		_
GAS		1	,
OPERATEM		1	
PROTATION CER	FC it	-	

# OIL CONSERVATION DIVISION P. O. BOX 2088 SANTA FE, NEW MEXICO 87501

Revised 10-01-78
Format 06-01-83
Page 1

THANSPORTER SALL	,		
OPERATOR REQUEST F	REQUEST FOR ALLOWABLE		
PROMATUSH CERICIE	AND		
	ISPORT OIL AND NATURAL GAS		
1 moco Production Company			
P.O. Box 18 Holls 11 88240			
Commy (Circle ) subject 602/	Other (Please explain)		
D	Dry Cas Request 1000 bbl testing allowable		
Charge to Ownership	Condensate 7090 - 7388 (Wolfcomp perfo)		
If change of ownership give name and address of previous owner	FOR MARCA		
II. DESCRIPTION OF WELL AND LEASE			
Miles S' Ference Well No. Pool Name, Including	Working State Federal or Fee LC - 067858		
Unit Letter F : 1650 Feet From The North L	1/53		
1 200 1000 1000 1000	ine and 1653 Feet From The West		
Lino of Section // Township /8-5 Range	27-E, NMPH, Eddy County		
III. DESIGNATION OF TRANSPORTER OF OIL AND NATURA	I CAS		
The Permian Corporation Person (54 9/1/87)	Andreas (Give address to which approved copy of this form is to be sent)		
Name of Authorized Transporter of Casingness Gas or Dry Gas	Address (Give address to which approved copy of this form is to be sent)		
Unit Sec. Two. 'Ree.			
give location of tanks.	is gas occupily connected? When		
If this production is commingled with that from any other lease or pool,	give commingling order numbers		
NOTE: Complete Parts IV and V on reverse side if necessary.	The state of the s		
VI. CERTIFICATE OF COMPLIANCE	OIL CONSERVATION DIVISION		
hereby certify that the rules and regulations of the Oil Conservation Division have seen complied with and that the information given is true and complete to the best of	APPROVED MAR 6 1985		
my knowledge and belief.	CYOriginal Signed By		
4 0 0 0	TITLE Supervisor District II		
Day C. Clark	This form is to be filed in compliance with RULE 1104.		
ant admin amakent	If this is a request for allowable for a newly drilled or deepened		
3-1-85 (Tale)	thute taken on the well in eccurdance with NULE 111.  All rections of this form must be filled out completely for allowable on new and recompleted wells.		
OFS NMOCD, A 1-JRB 1-FIN 1- GCC	Fill out cally Sentence to the transfer		
OFS NMCCD, A IJRB 1-FIN 1- GCC	well name or number, or transporter or other such changes of owner,  Separate Forms C-104 must be filed for each pool in multiply completed wells.		

Designate Type of Compl	ction - (X) OII Well Gas	Hell New Well	Motrovet	Doepen	Plug Back	Same ries'y	1000 5
Data Epudaca	Date Compl. Ready to Prod.		!	•	1		. , D A.
	Dane Compt. Reddy to Prod.	Total Dept	h	·	P.B.T.D.		·
Floretton (DC Date					P.SS.	•	
Elovations (DF, RKB, RT, GR, etc	11ame of Producing Formation -	Top OII/G					
		100 01176	iz bak		Tubing Dept	h	***
Perforations	<del></del>				1		
					Depth Casin	255	
						A 240.	
	TUBING, CASING	AND CERENTI	116 056006				
HOLE SIZE	CASING & TUBING SIZE	- MID CEMENTI					
	# 1001NG 312	- !	DEPTH SE	Τ	SA.	CKS CEMEN	, <del>T</del>
							<del>''</del>
		1			<del></del>	·	
					<del></del> -		
					<del></del>		
ATST DATA AND PROJECT	ET FOR AVIOUR						
'. TEST DATA AND REQUES	ST FOR ALLOWABLE (Test must	be after recovary	of total volume	e of land off			
7. TEST DATA AND REQUES OIL WELL	ST FOR ALLOWABLE (Test must oble for the	be after recovery (	of total volume	of load oil	and must be equ	ual to or exce	od top cild
7. TEST DATA AND REQUES OIL WELL. Date First Now Oil Run To Tones	ST FOR ALLOWABLE (Test muss oble for the					ual to or exce	ed top cild
	ST FOR ALLOWABLE (Test muss oble for t)		of total volume full 24 hours) sthod (Flow,			ual to or exce	od top cild
7. TEST DATA AND REQUES OIL WELL. Date First Now Oil Run To Tenza	ST FOR ALLOWABLE (Test must oble for the Date of Test Tubing Processes	Producing M	sthod (Flow,			ual to or exce	ed top cild
	Date of Test		sthod (Flow,			ual to or exce	ed top cilc
-ength of Tost	Tubing Process	Producing M	sthod (Flow,		i, etc.j	ual to or exce	ed top cild
-ength of Tost	Date of Test	Producing M	sthod (Flow,		Chose Size	ual to or exce	ed top cild
	Tubing Process	Casing Pros	sthod (Flow,		i, etc.j	ual to or exce	od top cilc
ength of Tost	Tubing Process	Casing Pros	sthod (Flow,		Chose Size	ual to or exce	ed top cild
ength of Tost	Tubing Process	Casing Pros	sthod (Flow,		Chose Size	ual to or exce	ed top cild
ength of Tool Citual Press, During Test AS WELL	Tubing Processe Oil-Eris.	Casing Pros	sthod (Flow,		Chose Size	ual to or exce	ed top cild
ength of Tost  Civet Press, During Test  AS WELL	Tubing Process	Casing Pros	ethod (Flow,		Chore Size		ed top cild
AS WELL	Tubing Process Oil-Eris. Length of Test	Casing Pros	ethod (Flow,		Chose Size		ed top cild
-ength of Tuzt	Tubing Processe Oil-Eris.	Casting Pros	ethod (Flow,	ушпр, сэг н	Chore Size		ed top cilc

# STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT

#### **OIL CONSERVATION DIVISION**

Drawer	DD	Arte	sia,	NM.
	DISTRICT	OFFICE	#2	

Jan. thru Apr. 1985 NO. 2159 T

### SUPPLEMENT TO THE OIL PRORATION SCHEDULE

DATE	March 6. 1985
PURPOSE	ALLOWABLE ASSIGNMENT - TESTING
	Effective March 1, 1985 a testing allowable of 1000 barrels of oil is
	hereby assigned to Amoco Production Company, Malco "S" Federal
	#1-F-11-18-27 in the Chalk Bluff Wolfcamp Pool for the month of
	March, 1985.

LAC: fc

Amoco Prod. Co.

PER

OIL CONSERVATION DIVISION

DISTRICT SUPERVISOR

	ŭ	٦			*							4 ( '	-				<b>ctic</b> RING				)	etti, tiller etti, tiller				FILE			
			;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	1/2	1	,	' ح	T.	ed.	2-	<u>.</u> /		i/		/			-										1/2-	7/8
													<u> </u>				<u> </u>	· .		-							RE		103
<b>,</b>	<del></del> .	1	f	05e	d On	N	res	16	ore tion		}		Ħ	714	251	1)	1	<del></del>	1	<u>-</u> I	7	ī —	7	T .			7		
-	a	<b>5</b> 7	er	-	n	<i>~</i>	Sp.	214	7/8	(3)	1	/ / r	/ ::^	ر (د: ا	ر ارتار	1,3	2.06	1	<u>ا</u>	<u> </u>	o	<u>'</u>	-		ļ		-		
	+	,		<u>-</u>		1	+					1		7.00	ļ	-	÷	1	/		<del> </del>	ļ	-	-				ļ.—-	
-	-			<del> </del>	-	÷	+-	+					2	_	<del> </del>	-	-	ゴト	/	}_	-	ļ.,	-			ļ.—	-	-	ļ
	+	7.1		_	<del> </del>	-	+-	+	-		ľ			$\geq$		$\triangleright$	$\leq$			-	9:	50	254	-	- 1		, , <u>, , , , , , , , , , , , , , , , , </u>	U-100	
-	+			1	+-	+	+	_	100	ם	<b>Y</b>	4	, , , , , , , , , , , , , , , , , , ,	1	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1 7	<u>ر</u> از ا	7.7	×			ļ.,	Fig		-		3		6
-	=		= 1	-	+	+	+	+	1	+-	+	1	(C)	<u>,</u>	1 12	مُومَّ	ر بر	هنت	<b>[</b> —	10	5	0'	Pe	f	350	10.7	3		20
		3.) " 3 <b>-</b>		+	+	-	+-	+		+-		1			-	+	<del> </del>		}—	-	-	a single						1	**
		* * * * * **				+	-		-	-	_	1		-	-	-			<b>?</b> —		-	-	-	-	17%		-		5 K
	+				-	+-	+-	+				ł			7			-	<b>[</b> _	<u> </u>	7		n			'ne	6	keeid F	***
	1	-		17.		+	-	+			+	1		-	رواز	100	- 4	$\gamma$	A	1	<del></del>	+	1	<del> </del>	·	at		+	+
23.				1	-	+	+-	-	+	-		1			2		, ,	/		: <b>5</b> /	10	-/~/	- :	> / °		ai		0	e
					-	+-	1			-		1			60		<del> </del>	//		62		_	1		-	-	10.45	7	45.
-	+			-	-	-	+-		+		-	1		ب. ر	12	松	12	//		62	25	+	-	-					
-	1			+	÷ -	TL.	A	6	٦ ﴿ ح	1		1		. *				//		7/2	<<	W.	٠	+ 4			, ,,	,	
	1			-	(	~<.	A		34	42	7	8				7		$\mathbb{Z}$	}	1		•		1 7	10		74		76
-	1		- ·		1					, <u>s</u>			3	) ,	1	15.67	· ·	$ar{}$	64	00		1							
13	1							T			1		~ }			*	1	5	100							,			
	Ī		-										7		G		T	35	21	Fro	m	690	0	-6	400			- 2.5	
													{	-				}								7.	1	H, etc.	
				-	1 -								Ş		ž Ç	35		37	CW	17	= 6	85	6	Re	۲	CB	1	14	٦
						_							. }	Z			1		IB	P 5 F5=	A 6	46	5	Cal	u	//	35	CA	\(\frac{1}{2}\)
	-i			<u> </u>							_	-	_ (	1	_	ļ	/	<u>}</u>	-			<u> </u>							λ.
	1			-	-		<u> </u>	_		-	_		_ {	/		*	1/	}	mt	plu	-	761	3'-	786	3				50
-	1			-		-		<u></u>	_	-	_	_	{		6			86	a/	پر/م		761 1683	<u>-</u> 9	432	<u> </u>		- 25%		
	-			-	<u> </u>	+-	-	-	_		_		}	1	12	<u> Les</u>	2	10	PRA	1) (	3 4 <i>9</i>	cm 495		-		-	ļ .		Y.
-	+			-	-	-	+			-		_	- }			+	4	1	į	1	1	- 6	1	91		1	-	_	2.5
-	÷		<u>.</u>	-	-		-	-	-		-		}			-		r <b>)</b>	<del> </del>	-	-	1		-	-	-	1	-	1
-	-			-	-	-	+-	+			+	1	_\		<u> </u>			ر ر	01	38		-	-	j., 24			-		
	<del>-</del>		-	-	-	+	1	+			+	$\dashv$			-	-		-	-		-		A	r Australi	-	-			-
-	•			<del> </del>		-	-		-	-		+			- Comment	-	-					-	-	<u>                                     </u>		-		3 3 3 3	3.3
	-	1		<del>!</del>	!		1								<del> </del>	<del> </del>	-	-				-							1 1 16 A
<u> </u>						-		m visos						<u> </u>	-	1	-					1							-
-											-				+	<del> </del>							-		-				
					•							-					<del>!</del> -		<del> </del>		-	+	-	<del> </del>	<del> </del>	<del> </del>			-

Form 3160-5	ואני	D STATES	SUBMIT IN TRIPL	Buaget Bureau No. 1004-0135 Expires August 31, 1985
November 1983) Commerly 9-331)		OF THE INTERI		5. LEASE DESIGNATION AND SERIAL NO.
·	BUREAU OF	LAND MANAGEMENT		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
SUN (Do not use this	DRY NOTICES  form for proposals to d	AND REPORTS C	NA WELLS 210 NA MELLS 210 NA ME	O. IF INDIAN, ADDOTTED OR TRIBE NAME
1. OIL GAB WELL WELL	OTHER	NOV 1 5 1985		7. UNIT AGREEMENT NAME
2. NAME OF OPERATOR		NOA 19 1200		8. FARM OR LEASE NAME
AMOCO PRODUC		O. C. D.		Nalco "S Federal 9. WBLL NO.
P.O. BOX 68	HOBBS, NEW MI	XICO ARGESTA, OFFICE		/
4. LOCATION OF WELL (F See also space 17 belo At surface	leport location clearly a	nd in accordance with any	State requirements.*	Chalk Bluff Wolf Camp
1650	<u>2 ' F</u> <u>√</u> L x ∠	<u>'653 ' FW</u> L		11. SEC., T., E., M., OR SLK. AND SURVEY OR ARMA
(UNIT	F , SE/4,	NW/4)		12. COUNTY OF PARISON 13. STATE
14. PERMIT NO.		2 507 10 K	)	Eddin NM
300/5205/		ate Roy To Indicate N	ature of Notice, Report, o	r Other Data
	NOTICE OF INTENTION TO			SEQUENT REPORT OF:
TEST WATER SHUT-O	PELL OR	ALTER CASING	WATER SHUT-OFF	REPAIRING WELL
FRACTURE TREAT	<u>  </u>	E COMPLETE	FRACTURE TREATMENT	ALTERING CASING
SHOOT OR ACIDIZE	ABANDO	·  X	SHOOTING OR ACIDIZING	ABANDONMENT [®]
REPAIR WELL	CHANGE	PLANS		ults of multiple completion on Well
(Other)	R COMPLETED OPERATIONS	(Clearly state all pertineur	datails and give pertinent de	ompletion Report and Log form.) ites, including estimated date of starting any
proposed work. If nent to this work.)	well is directionally d	rilled, give subsurface locat	ions and measured and true ver	rtical depths for all markers and gones perti-
Propose to perma	anenthy Plug ? 1	Handon astollow	is: Notity BLM In	or commencing operations.
•			$\sigma$	J
1. MISU and				
				cement. Run CBL from 6000 to TCMT
			#/gal gelled brine (	
•		71		shoe and top of 5 1/2 "linee.)
<i>v</i> ₁			ross the TCMT found	lin step 2 above.
6. Perforate 8;	78" come from	~ 1050'-1049' with	4JSPF.	
7. RIH with 8%	8" cement reta	iner. Set retaine	vat±950'. Stingin	to retainer and pump 3005x class C
Neat cemen	t and circular	to to surface them	8 7/8 and 11 3/8 " brace	derhead on tlet.
8. Spotiosx Cla	ss (Neat com	ent from 40' to Say	bee. Remove well hea	dandnistall Px A Marker.
		FJN, 1 - CMH		
SIGNED JA	che moder	ring TITLE Adr	ninistrative Analys	t(SG) DATE 9/30/85
(This space for Fed	eral or State office use)	(1)		11.11.65
APPROVED BY	e s pari	TITLE		DATE 11-14-85
CONDITIONS OF A	PPROVAL, IF ANY:			

#### *See Instructions on Reverse Side

Title 18 U.S.C. Section 1001, 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.

Form	9-331
(May	1963)

### UI ED STATES UI ED STATES SUBMIT IN TRII (Other Instruction OF THE INTERIOR verse side)

ATE*

Form approved. Budget Bureau No. 42-R1424. 5. LEASE DESIGNATION AND SERIAL NO.

LC-067858 6. IF INDIAN, ALLOTTEE OR TRIBE NAME

GEOLOGICAL SURVEY

SHNDRY	NOTICES	AND	<b>REPORTS</b>	$\bigcirc N$	WFIIC
SUNDEL	NOTICES	MINU	REFURIS	UN	WELLS

	(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  Use "APPLICATION FOR PERMIT—" for such proposals.)	
1.	WELL GAS OTHER DRILLING	7. UNIT AGREEMENT NAME
	NAME OF OPERATOR  OF THE UCTION COMPANY	8. FARM OR LEASE NAME MALCO "A" Jederal
3.	ADDRESS OF OPERATOR  10. 110898, N. M. 88240	9. WELL NO.
4.	1650 FNL × 1653 FWL Sec 11 (Unit F, SE/4114/4)	10. FIELD AND POOL, OR WILDCAT  WILD CAT  11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
	(000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 000 1, 00	11-18-27 NMPN

14. PERMIT NO. 15. ELEVATIONS (Show whether DF, RT, GR, etc.)

04

#### Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

				., .,	
NOT	ICE OF	INTENTION TO:	SUBSEQUENT REI	PORT OF:	
TEST WATER SHUT-OFF FRACTURE TREAT SHOOT OR ACIDIZE REPAIR WELL (Other)		PULL OR ALTER CASING MULTIPLE COMPLETE ABANDON* CHANGE PLANS		WATER SHUT-OFF FRACTURE TREATMENT SHOOTING ON ACIDIZING  (Other) Output (NOTE Report results of mult Completion or Recompletion Re	the completion on Well
VECULUS DECEMBED OF CO	MALETI	en openimova /Clearly state	. 11		

OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting if well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones p

proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and z

Mobile Drig Co Spuddled 15" hole 2:30 Pm 10-16-71.

On 2-18-71, 1134" OD 47" K-55 Cassing was set

@ 1000' w/ 970 Sx Incor. 2% CACL 1 570" Tofplug.

Cement circ. Gyter TUDC 18 hours. Tested Cog

w/ 8000 ps, Joh 30 min. Jest O.K.

Liducled hole to 11" @ 1000' and resummed.

drilling.

RECEIVED

OCT 22 1971

O. C. S. ARTESIA, OFFICE

19 I houshy anatie the			
SIGNED	it the foregoing is true and con	AREA SUPERINTENDENT	DATE 357 2 0 177
APPROVED BY CONDITIONS OF A		*See Instructions on Reverse Side	DATE NO. 12 No.

# --- even U. U. U. Sancii p

U TED STATES SUBMIT IN TRI SATE Budget Bureau No. 42-R1424.

DEPARTMENT OF THE INTERIOR (Other Instructio. on re
S. LEASE DESIGNATION AND SERIAL NO.

	GEOLOGICAL SURVEY		上しているである
SUNDR (Do not use this form Us	6. IF INDIAN, ALLOTTEE OR THIBE NAM		
1. GAS GAS	OTHER DRILLING		7. UNIT AGREEMENT NAME
2. NAME OF OPERATOR			8. FARM OR LEASE NAME
Arnoco Productio	on Company /		MALCO A JULY
3. ADDRESS OF OPERATOR BOX 63, HOBBS, N. M	A 88240		9. WELL NO.
	rt location clearly and in accordance with	any State requirements.*	10. FIELD AND POOL, OR WILDCAT
At surface			MILDCUT
1650 FML × 1	1653 FWL Sec. 11 (	F. SE/4 NW/4)	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
	`		11-18-27 MMP
14. PERMIT NO.	15. ELEVATIONS (Show whether 3587)	Pr DF RT, GR, etc.)	12. COUNTY OR PARISH 13. STATE
10			12000 1 1111
	Check Appropriate Box To Indicate		
	CE OF INTENTION TO:	, s	QUENT REPORT OF:
TEST WATER SHUT-OFF FRACTURE TREAT	MULTIPLE COMPLETE	WATER SHUT-OFF FRACTURE TREATMENT	REPAIRING WELL ALTERING CASING
SHOOT OR ACIDIZE	ABANDON*	SHOOTING OR ACIDIZING	ABANDONMENT*
REPAIR WELL (Other)	CHANGE PLANS	(Other)(Note: Report resul	ts of multiple completion on Well
proposed work. If wel nent to this work.) *	MPLETED OPERATIONS (Clearly state all pertilistics directionally drilled, give subsurface	inent details, and give pertinent data locations and measured and true vert	es, including estimated date of starting a ical depths for all markers and zones be
18 hours, Jest O.K	/300 s4. Class Tested Cusine	141/	for 30 min
18 hours, Test O.K Reduced	+ + 1' 1 . · ·	g. W/1500 ps.	for 30 min
18 hours, Jest O.k Leduced	tested cusine	g. W/1500 ps.	after NOC. To r 30 min
18 hours, Ilst O.K Reduced	tested cusine	g. W/1500 ps.	after noc. Jor 30 mi
18 hours, Ilst O.K Leduced	tested cusine	g. W/1500 ps.	after NOC for 30 min
18 hours, Ilst O.K Leduced	tested cusine	g. W/1500 ps.	RECEIVE
18 hours, Test O.k Leduced	tested cusine	g W/1500 ps.	RECEIVEL NOV 15 1971
18 hours, Jest O.k Reduced	tested cusine	RECEIVED  NOV 16 1971  G. C. C.	RECEIVEL NOV 15 1971 U. S. GROLORICAL SUP-
18 hours, Test O.k Leduced	tested cusine	RECEIVED  NOV 16 1971	RECEIVE NOV 15 1971 U. S. GOLOGICAL SUP-
	tested Cusing hole to 718 @ 6	RECEIVED  NOV 16 1971  C. C. C.  ARTESIA, OFFICE	RECEIVEL NOV 15 1971 U. S. GROLORICAL SUP-
	tested Cusing hole to 718 @ 6	RECEIVED  NOV 16 1971  G. C. C.	RECEIVEL NOV 15 1971 U. S. GROLORICAL SUPPLY
18. I hereby certify that the	hole to 7% @ 6	RECEIVED  NOV 16 1971  C. C. C.  ARTESIA, OFFICE	RECEIVEL NOV 15 1971 U. S. GROLORICAL SONARTERIA, MSW. MICHIE
18. I hereby certify that the	foregoing is true and correct  TITLE  TITLE	RECEIVED  NOV 16 1971  C. C. C.  ARTESIA, OFFICE	RECEIVEL NOV 15 1971 U. S. GROLORICAL SUP- ARTERIA, HSW MICHIO
18. I hereby certify that the SIGNED (This space for Federal of APPROVED BY	foregoing is true and correct  TITLE  TITLE	RECEIVED  NOV 16 1971  C. C. C.  ARTESIA, OFFICE	RECEIVEL NOV 15 1971 U. S. GROLOGICAL SUP- ARTESIA, MSV MARTIN
18. I hereby certify that the  SIGNED  (This space for Federal of APPROVED BY CONDITIONS OF APPR	foregoing is true and correct  TITLE  OF State office use)  TITLE	RECEIVED  NOV 16 1971  C. C. C.  ARTESIA, OFFICE	RECEIVE NOV 15 1971 U. S. GROLOGICAL SUPARTERIA, MSV MAXIM
18. I hereby certify that the SIGNED	foregoing is true and correct  TITLE  OF State office use)  TITLE	RECEIVED  NOV 16 1971  C. C. C.  ARTESIA, OFFICE	NOV 15 1971 U. S. GROLOGICAL SUPARTERIA, HSV MIXIO

Form 9-331 U TED STATE (May 1965)  DEPARTM: IT OF THE	SUBMIT IN TR' CATE Porm approved.  NTERIOR verses side)  SUBMIT IN TR' CATE Budget Bureau No. 42-R1421  5. LEASE DESIGNATION AND SERIAL NO.
GEOLOGICAL SU	1
SUNDAY NOTICES AND REP	
OIL GAS TO OTHER	7. UNIT AGREEMENT NAME
2. Since of organical Company	8. FABM OR LEASE NAME
3. Address of operator	9. WELL NO.
<ol> <li>LOCATION OF WELL (Report location clearly and in accordance Sec also space 17 below.)</li> <li>At surface</li> </ol>	1,9110000
1088 3111 : 1988 FUL Sec.	11. SEC., T., R., M., OR BLK, AND SURVEY OR AREA
14. PERMIT NO. 15. ELEVATIONS (Show	whether DF, RT, GR, etc.)  12. COUNTY OR PARISH 13. STATE
16. Check Appropriate Box To li	dicate Nature of Notice, Report, or Other Data
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF PULL OR ALTER CASING PRACTURE TREAT MULTIPLE COMPLETE SHOOT OR ACIDIZE ABANDON* RUPAIR WELL CHANGE PLANS (Other)	WATER SHUT-OFF  FRACTURE TREATMENT  SHOOTING OR ACIDIZING  (Other)  (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
17. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work. If well is directionally drilled, give subspent to this work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIPE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIPE PROPOSED OR COMPLETED OPERATIONS (Clearly state proposed work.)  1. DENCRIPE PROPOSED OR COMPLETED OPERATIONS (CLearly state proposed work.)  1. DENCRIPE PROPOSED OR COMPLETED OPERATIONS (CLearly state proposed work.)  1. DENCRIPE PROPOSED OR COMPLETED OPERATIONS (CLearly state proposed work.)  1. DENCRIPE PROPOSED OR COMPLETED OR COMPLETED OPERATIONS	I pertinent details, and give pertinent dates, including estimated date of starting any face locations and measured and true vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and the vertical depths for all markers and zones pertined and zones pe
Evaluating.	RECEIVED

DEC29 1971 U. S. GOLGEGAL SAME ARTERIA, PARA SAME

10,10,100 10,10 10,10	The state of the s	From: Moles A Force	A HIM NOS
S. I hereby certify SIGNED	that the foregoing is true and	AREA SUPERINTENDENT	DATE
APPROVED BY	FAPPROVAL, IF ANY:	TITLE LISTRICE ENGINEER	DADEC 2 9 1971

*See Instructions on Reverse Side

Form	9-330
(Rev.	5-63)

### N. M. O. C. C. CORY -

•		-		
gı	TRMTT	TN	DITE	A TT

1			

M	u
erper	2
رادا	¥

し、TED ST	ATES SUBMIT	r
DEPARTMENT OF T	HE INTERIOR	,
GEOLOGICAL S	URVEY	

SUBMIT IN DI	DUP. ATE* (See other instructions on	Form approved. Budget Bureau No. 42-R355,	5.
RIOR	reverse side)	5. LEASE DESIGNATION AND SERIAL NO	ō.
* *		10 00-0-0	

	L	C- C	67	18	5	8	
3.	IF	INDIAN,	ALLO	TTER	OR	TRIBE	NAM

						<u> </u>	1000
WELL CO	MPLETION	N OR RECO	<b>OMPLETION</b>	REPORT AN	D LO	0	OTTED OR TRIBE NAME
1a. TYPE OF WE	LL: 01	II. GAS					NO. NAMES
b. TYPE OF CO		ELL WELL	DBY, L	RHECEI	VEL	7. UNIT AGREEME	NT NAME
NEW WELL	WORK D	EEP- PLUG	DIFF.	Other		8. FARM OR LEAS	R NAME
	OVER L E				070		٠ – ٠
2. NAME OF OPERA	Production	Company		J.7.14	1972	MALCO &	<u>rederal</u>
3. ADDRESS OF OP	ERATOR -				}	- 2	
00Y 40 1	LANCE NI LA	99946		ARTO A	3.	10. FIELD AND RO	OL, OR WILDCAT
4. LOCATION OF W	HOBBS, N. M. Ell (Report local	tion clearly and i	n accordance with ar		ite)	- Schagen As	To mener
At surface		·	176.1			11. SEC., T., R., M.	OR BLOCK AND SURVEY
1650 FN	LY 1653 F	WL Sec. 1	1 (7, SW/4	NW/4:)	!	OR AREA 5	5-1-72
ar top prounts							
At total depth				<u> 14</u>		11-18-2	NMPM
		* * * * * * * * * * * * * * * * * * * *	14. PERMIT NO	DATE	ISSUED	12. COUNTY OR PARISH	13. STATE
					· i	EDDY	N.MI.
15. DATE SPUDDED	16. DATE T.D.		ATE COMPL. (Ready 1	- 1 20. 222		-,,,,	ELEV. CASINGHEAD
10-16-71	12-5-		12-20-7		<u> 3587</u>	R.D.B.	· · · · · · · · · · · · · · · · · · ·
20. TOTAL DEPTH, ME	21. PI	LUG, BACK T.D., MD	A TVD 22. IF MUI	TIPLE COMPL.,	23. INTE	RVALS ROTARY TOOLS	CABLE TOOLS
<u> 10, 168</u>		10,000	1	1	<u>:  —</u>	$\rightarrow 10-TD$	25. WAS DIRECTIONAL
24. PRODUCING INT	ERVAL(S), OF THI	S COMPLETION-1	OP, BOTTOM, NAME (	WD WAD TARD			SURVEY MADE
0621 0	າດ າວ'				:		No 10
26. TYPE ELECTRIC	AND OTHER LOGS	RUN	· · · · - · · · · · · · · · · · · · · ·		1	27	WAS WELL CORED
GR-N	$\mathcal{D}_{\mathbf{z}} = \mathcal{D}_{\mathbf{z}}$	) Т	<u> </u>		:		
28.	PRUX, IC	DROSITY, CA	SING RECORD (Re	nort all strings set	in spell)		<u> </u>
CASING SIZE	WEIGHT, LB			LE SIZE		ENTING RECORD	AMOUNT PULLED
11 3/4"	47	7 4 1 (	200	15.	970	Sx	\\
8 5/R"	37	A 6	548'	11.	300		
5 1/2" LIN	ier i'	7 6277-	10138	7 1/8"	855	••	
							-
29.		LINER RECOR	D .		30.	TUBING RECORD	
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
			_		2 3/8	9504	949
31. PERFORATION RI	CORD (Interval.	size and number)		l a	177 67700		
	, .	•	· ·	32. AC		FRACTURE, CEMENT SQU	
9621-27, 6 9735, 39; 9851-56;	01-14,04,7	86	, •	9735- 992		AMOUNT AND KIND OF	CE V 20 //CI
3 1 2 2 3 3 3	44, 12, 13	5,-04, 31-37	)	3130-376	7	300 gal 10% H	CF X 3/0 HLL
9929'	30, 04, 00	),	•.		· · · · · ·		<del></del>
3327		us/ 2.15 f	F				
33.*		<del>10   10   10   10   10   10   10   10 </del>		DUCTION	: 1	i i i i i i i i i i i i i i i i i i i	i kili .
DATE FIRST PRODUC	TION PRO		(Flowing, gas lift, p	umping—size and l	yps of pum	(p) WELL STAT	8 (Producing or
12-16-11		FLW			. !	SHUT.	$\mathcal{I}\mathcal{N}$
DATE OF TEST	HOURS TESTER		MEGM DEDICE	OIL—BBL.	GAS-MC		GAS-OIL RATIO
1-2-12	4	<u>  VARIO</u>	$003 \longrightarrow$	9.3	70	08 0	76 136
FLOW. TUBING PRESS.	CASING PRESSI	URE CALCULATE 24-HOUR R		GASANCE		WATER-BBL. OIL	GRAVITY-API (CORR.)
2035-2689	PKR	or fuel, vented, etc		1078	5	0	54
TO S		Maarrea, etc	$\widehat{\mathcal{A}}$		18	TEST WITNESSED	
	\ _ ~	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<i>→</i> = ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	e transfer in the first		PECE	VEN
35. LIST OF ATTACE	OLD -	IHEKEI	<b>HENDING</b>				
~ /	OLD -	IIIHKK <u>E</u> I	FEITOITIG		-		10.22
NONE		Ing and attached	37.	lete and correct a	determine	JAN-6	1972
NONE		ung and attached	information is comp	* 1	1.1	d from all available record	1972
NONE		ong and attached	information is comp	plete and correct as	1.1	d from all available record	1972 19 2000

(See Instructions and Spaces for Additional Data on Reverse Side)

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and or Extractions on litens 22 and 24, and 33, below regarding separate reports for separate completions.

If the deep prior can be submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure the submitted, copies of all currently available logs (drillers, geologists, sample and regulations. All attachments should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments about the first of the specific instructions.

Here of the first of the specific instructions.

Here of the first of the specific instructions.

Here of the first of the specific instructions are required by applicable specific instructions.

Here of the first of the specific instructions are required by the interval zone (multiple completion), so state in item 22, and in any attachments. Thus, 2 and 24 it this well is completed for separate production from more than one interval zone (multiple completion), so state in item 24 show the producing interval to be separately produced, showing the additional data pertinent to such interval.

Here of the first of the separately produced, showing the additional data pertinent to such interval.

Here of the first of the separately produced, showing the additional data pertinent.

Here of the first of the separately produced showing the additional data pertinent.

Here of the first of the separately produced showing the additional data pertined. (See instruction for items 22 and 24 above.)

TRUE VERT. DEPTH j jake kir na diriji jira na narawa 3 77f 1900 RO ROT TOP 17-2000 Compound uction to 17-2000 Compound Co MEAS. DEPTH GEOLOGIC MARKERS 140000 M M 20004: NAME 38. 7.788 (10) 850 5. 1715 875.5 100 (5.08) 31 SUMMARY OF POROUS ZONES:

BHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THERROF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING
DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, PLOWING AND SHUT-IN PRESSURES, AND RECOVERIES TRACE CON NESSECUEDO 12-5 -05 116 41 .22 2011 SS2S Legione com aux Prox Pieco ETC. DESCRIPTION, CONTENTS, CARING RECORD (00) THE HT930 4 Berolinsa 5.E LINER RECORD S/4 (div) Monton eq. 29 Ò, of gams) では SOU K.UOKE 1611, 21005 1611, 21005 .1017 -- 87 1296 CATCULATED 24-1900 RATE รับนักเกิดที่สั T. FORMATION that the foregoing and attached information is SUPE Data on Reverse Side) (See Instructions and Spaces for Additional  $\supset$ 

GOVERNMENT PRINTING OFFICE: 1963—O-683636

7,458

".

2015 

4.

SFIATE GET.

* .

18. I hereby certify t	hat the foregoing is true and	correct			
SIGNED	2.2	A	REA SUPERINTENDENT	DATE 1 9 1872	_
APPROVED BY		TITLE	DISTRICT ENGINEER	FEB 2 1972	_
SGS HET SON	ADPROVAL, IF ANY:				

*See Instructions on Reverse Side

NO. OF COPIES RECEIVED		15	
DISTRIBUTIO	DISTRIBUTION		
SANTA FE			
FILE			1
U.S.G.S.			
LAND OFFICE			I
TRANSPORTER	OIL	1	
I HANSI ON LA	GAS		
OPERATOR		,	
		i	

# NEW MEXICO OIL CONSERVATION COMMISSION REQUEST FOR ALLOWABLE

AND RECEETIVES PRAISPORT OIL AND MATHRAL CAS

Form C-104 Supersedes Old C-104 and C-110 Effective 1-1-65

-	0.5.6.5.	AU THURIZA HUN TU TRA	NSPURT UIL AND	NATURAL G	AS	
	LAND OFFICE					
	OIL I	DEC 25 1972	SURVEYS - BACK	SIDE)		
	TRANSPORTER GAS	DEC-2 9 13/2				
	OPERATOR					
H		O. C. C.			API-30-01	5-20510
1.	PRORATION OFFICE	ARTESIA, DEFICE				20320
	Amoco Production C	ompany Charles				
1						
ł	Address	40				
	BOX 68, HOBBS, N. M. 8824					
1	Reason(s) for filing (Theck proper box)		Other (Plea	se explain)		
- 1	New Well [X]	Change in Transporter of:				
	Recompletion	Oil Dry Ga	s <b>X</b>			
- 1	Change in Ownership	Casinghead Gas Conder	sate			
L					<del></del>	
1	f change of ownership give name					
á	ind address of previous owner					
	DESCRIPTION OF WELL AND I	LEASE		Kind of Lease		1 1
j	Leane Name	Well No. Pool Name, Including Fo		į.		Legse No.
	MALCO "S" FEDERAL	1 SCOGGIN DRAW-	MORROW Lake	State, Federa	l or Fee FED	LC-067858
ı	Location					
-	Unit Letter F; 16!	50 Feet From The NORTH Lin	e and 1653	Feet From 1	The WEST	
	Oint Better					
1	Line of Section 11 Tow	vnship 18-S Range	27-E , NMF	M, EDDY		County
L						
11	DESIGNATION OF TRANSPORT	TER OF OIL AND NATURAL GA	ıs			
4#.	Name of Authorized Transporter of Oil	or Condensate	Address (Give addres	s to which approx	ved copy of this form	is to be sent)
Ì			P 0 Row 31	10 Midler	d Tayes 797	701
	Amoco Production Companion of Authorized Transporter of Cas	If (If UCKS)  or Dry Gas  n	Address (Give addres	s to which appro-	nd, Texas 797 ved copy of this form	is to be sent)
i		A 4 4				
l	Amoco Production Compan		P. O. Box 68			3240
ļ	If well produces oil or liquids,	Unit Sec. Twp. Rge.	1	sted?   whe	_	,
1	give location of tanks.	F 11 18-S 27-E	Yes		12-27-72	
,	f this production is commingled wit	th that from any other lease or pool,	give commingling ord	er number:		
	COMPLETION DATA					
		Oil Well Gas Well	New Well Workove	r Deepen	Plug Back   Same I	Restv. Diff. Restv.
	Designate Type of Completic	on = (X)	X :	1	1	
	Date Spudded	Date Compl. Ready to Prod.	Total Depth		P.B.T.D.	
	10-16-71	12-20-71	10,168'		10.000'	
	Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation	Top Oll/Gas Pay		Tubing Depth	
	•		9,621		9.504'	
	3587' RDB	Penn-Morrow	7,021		Depth Casing Shoe	
	Perforations	21 061 07251 201 421 721	751 0/1 011 0		10	.138'
	9621 - 27 , 67 - 72 , 8	2',86',9735',39',42',72'	,/5 - 64 , 91 - 9	<u>5. 40515</u>	10	130
	58',64',66',9929'	TUBING, CASING, AN			<del></del>	
	HOLE SIZE	CASING & TUBING SIZE	DEPTH	SET	SACKS C	
	15"	11-3/4"	1000'		970 \$	
	11"	8-5/8"	6 <b>348</b> '		300 8	
	7-7/8"	5-1/2"	6277'-1	0138'	855 9	SX
		2 3/8"	9504 pp			
•	TOTAL AND DECIDED D		ifter recovery of total vo		and must be squal to	or exceed top allow-
V.	TEST DATA AND REQUEST FO	able for this de	epth or be for full 24 ho	urs)		
	OIL WELL Date First New Oil Run To Tanks	Date of Test	Producing Method (F		ift, etc.)	
	Date i list iten Oli iteli i o i alles			-		
		Tubing Pressure	Casing Pressure		Choke Size	
	Length of Test	rannia Liebama				
		Tour But-	Water - Bbls.		Gas-MCF	
	Actual Prod. During Test	Oil-Bbls.	174501 - DMIEN		1	
			<u> </u>		1	
	GAS WELL					
	Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/Mi	ACF	Gravity of Condens	ate
	AAOF - 10785	4 Hr.	12		54 <b>0</b>	
	Testing Method (pitot, back pr.)	Tubing Pressure (Shut-in)	Casing Pressure (Sh	ut-in)	Choke Size	
	4 - Pt	2862	PKR _	-	VARIOUS	3
				CONCEDIA	ATION COMMISS	
VI.	CERTIFICATE OF COMPLIAN	CE	11			NON
			APPROVED D	EC 29 197	'2	
	I hereby certify that the rules and	regulations of the Oil Conservation	APPROVED	A 11	-1	,
	Commission have been complied to	with and that the information given e best of my knowledge and belief.		16 Stree	sell	
	above is true and complete to the	e nest or my knowledge and netter.	11 = 1			

(Signature) AREA SUPERINTENDENT

Granius

(Title)

12-27-72 0 & 4 - NMOCC-Art _1__Div_ 1 - JEL 1 - OBP 1 - Susp 1 - RRY (Date) 2 - Hondo

TITLE _____ GAS INSPECTOR

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out only Sections I. II. III, and VI for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply

<u>DEVIATI</u>	ON SURVEYS
	DEGREES
DEPTH	OFF
740	1/2
1300	1/4
1670	1/4
2040	1/4
2460	1/2
2790	1/2
<b>2</b> 970	1-1/4
3500	3/4
4000	3/4
4560	10
4890	10
5100	1-1/4
5610	1
6020	2-1/2
6195	2-1/2
6 <b>34</b> 5	2
6970	2-1/4
75 <b>1</b> 0	1
8152	1-3/4
9430	3/4
10165	1

The above are true to the best of my knowledge.

AREA SUPERINTENDENT Engineer

Sworn to this date. December 27, 1972

NOTARY PUBLIC IN & FOR LEA COUNTY, NEW MEXICO

MY COMMISSION EXPIRES & 15-76

THE OTH COMESSION - COMMISSION - COMMISSION

Form 9-331 Dec. 1973

Form Approved. Budget Bureau No. 42-R1424

UNITED STATES	E 15405
DEPARTMENT OF THE INTERIOR	5. LEASE RECEIVED
GEOLOGICAL SURVEY	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
OUNDRY NOTICES AND DEPORTS ON WELLS	7. UNIT AGREEMENT NAME MAY - 6 198
SUNDRY NOTICES AND REPORTS ON WELLS  (Do not use this form for proposals to drill or to deepen or plug back to a different	
reservoir. Use Form 9–331–C for such proposals.)	8. FARM OR LEASE NAME
1. oil gas well other	Malco "S" Federal ARTESIA, OFFICE 9. WELL NO.
2. NAME OF OPERATOR	1
Amoco Production Company /	10. FIELD OR WILDCAT NAME
3. ADDRESS OF OPERATOR	Scoggin Draw-Morrow Gas
P. O. Box 68, Hobbs, New Mexico 88240  4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
AT SURFACE: 1650' FNL x 1653' FWL, Unit F	12. COUNTY OR PARISH 13. STATE
AT TOP PROD. INTERVAL: Sec. 11 T-18-S. R-27-F	Eddy NM
AT TOTAL DEPTH:	14. API NO.
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE,	
REPORT, OR OTHER DATA	15. ELEVATIONS (SHOW DF, KDB, AND WD)
REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:	3587 ' RDB
TEST WATER SHUT-OFF	
FRACTURE TREAT	
SHOOT OR ACIDIZE	(NOTE: Report results of multiple completion or zone
PULL OR ALTER CASING	change on Form 9–330.)
MULTIPLE COMPLETE   CHANGE ZONES	
ABANDON*	
(other)	
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly statincluding estimated date of starting any proposed work. If well is dimeasured and true vertical depths for all markers and zones pertiner  Moved in service unit 3-2-82. Ran swab for level 2100 ft. from surface. Final fluid 1 Ran gamma ray temp. log. Pumped 8000 gal 7 staged with 150 ball sealers. Ran after gam log. Ran swab with light show of gas. Mov Flow tested for 48 hrs. and flowed 342 MCF.	irectionally drilled, give subsurface locations and not to this work.)*  8 hrs. with initial fluid evel 9400 ft. from surface.  1-1/2% HCL NEFE acid with additives ma ray and temp. treatment ed out service unit 3-8-82.
	1092
O+4-USGS, A 1-Hou 1-Susp 1-CLF	APR 2 7 1982
	SURVEY
Subsurface Safety Valve: Manu. and Type	U.S. GEOLOGICAL SURVEY
18. I hereby certify that the foregoing is true and correct	ROSWELL, NEW MEXICO Ft.
1 ath of the new N	. ,—
SIGNED Cittly & Joseph TITLE AST. Adlil. AF	WITH STATE
(This space for Federal or State of	fice use)
APPROVED BY TITLE	THE PROPERTY OF THE PROPERTY O
CONDITIONS OF APPROVAL, IF ANY:	MAR 22 1982
*See Instructions on Reverse	Side OH & CAS SURVEY  U.S. CEOLOGICAL SURVEY  U.S. CHOOG HEN MEXICO

Form 9-331

الم المان المان الم

1. 7. 12 E W.

Form Approved.

Dec. 1973		ACL	,,,,,	1. *** ** ***	Budget Bur	eau No.	42-R1424
	UNITED STA	ATES	ſ	5. LEASE			
	DEPARTMENT OF TI	HE INTERIOR	1	LC-	-067858		
c/SF	GEOLOGICAL S	SURVEY			ALLOTTEE OR	TRIBER	CEIVED
	Y NOTICES AND R form for proposals to drill or t form 9-331-C for such proposals			7. UNIT AGRE	EMENT NAME	MAY	- 4 198
reservoir. Use fo	rm 9-331-C for such proposals	i.)		8. FARM OR L	EASE NAME		
1. oil well	gas well other			Malco "S 9. WELL NO.	S" Federal	ARTESI,	C. D. A, OFFICE
2. NAME OF	OPERATOR			1			
Amo	oco Production Com	ipany /		10. FIELD OR V			
	OF OPERATOR			Scoggin	Draw-Morr	ow Ga	S
P.	0. Box 68, Hobbs,	New Mexico	88240	11. SEC., T., R	., M., OR BLK.	AND SL	JRVEY OR
	N OF WELL (REPORT LOC			AREA			
below.)	1650' FNL x	( 1653' FWL, U	nit F	11-18-2			
AT SURF	ACE: PROD. INTERVAL: Sec.	11. T-18-S.	R-27-F	12. COUNTY O	R PARISH 13.		
AT TOTAL		11, 1 10 0,		Eddy		NM	
				14. API NO.			
	APPROPRIATE BOX TO IN OR OTHER DATA	IDICATE NATURE O	F NOTICE,				
KLI OKI,	OR OTHER DATA			15. ELEVATION		KDB,	AND WD)
REQUEST FO	R APPROVAL TO:	SUBSEQUENT REPO	RT OF:	358	37 ' RDB		
TEST WATER							
FRACTURE TI		ā	~		ر المستخدم الموسيد المستخدم ا		
SHOOT OR A		$\square$	3				
REPAIR WELL			***************************************	(NOTE: Report	results of multiple		tion or zone
PULL OR ALT	<b>=</b>	Ц	į		on Form 9-330.)		
MULTIPLE CO CHANGE ZON	· <del>-</del>	님	g İ	₩ EPR 23	1982		
ABANDON*	<b>'</b> '3	H	Ť	•i k	i transmit	,	
(other)				2.1.2	OAS		
			·····	- 0.5. GLOLUGI <del>- loswei ne</del>	DAL MATERIAL		
including	BE PROPOSED OR COMPLI g estimated date of starting d and true vertical depths f	g any proposed work	<ul> <li>If well is d</li> </ul>	irectionally drilled	etails, and give d, give subsurf	e pertin ace loca	ent dates, ations and
		:					
500 550 XL- 10 ₁	ved in service uni 00 ft. from surfac 00 gal XL-4 gel, 2 -4 gel, 1-1/4 gal # gel. Flow teste 08 MCF. Returned	e. Final flu 2750 gal CO2, CO2 , and 231 ed for 96 hrs.	id level and 2310 0# 20/40 and flow	9000 ft. fr # 20/40 sand sand. Flus	rom surfact d. Pumped shed with	e. P 2500 48 bb	umped gal ls
	4-USGS,A 1-Hou	•	1-CLF		Set @ .		Ft
Subsulface S	raicty vaive, Mailu, and Typ	JC			set @ .		г

ACCEPTED FOR RECORD

(Inis space for Federal or State office use)

SIGNED Cathy & German TITLE AST. Adm. Analyst DATE 4-19-82

APPROVED BY CONDITIONS OF

APPROVAL, IF ANY CHESTER

18. I hereby certify that the foregoing is true and correct

3 1982

___ DATE _

MAY

U.S. GEOLOGICAL SURVEY. See Instructions on Reverse Side ROSWELL, NEW MEXICO

Form 9-331

---

PULL OR ALTER CASING MULTIPLE COMPLETE CHANGE ZONES ABANDON* (other)

Form 9–331 Dec. 1973	Form Approved.
UNITED STATES  DEPARTMENT OF THE INTERIOR  GEOLOGICAL SURVEY	5. LEASE LC-067858 6. IF INDIAN, ALLOTTEE OR TRIBE NAME
SUNDRY NOTICES AND REPORTS ON WELLS (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9–331–C for such proposals.)	7. UNIT AGREEMENT NAME
1. oil gas well other of C	8. FARM OR LEASE NAME Malco "S" Federal 9. WELL NO.
2. NAME OF OPERATOR AMOCO Production Company ARTESIA, OFFICE	1 10. FIELD OR WILDCAT NAME
3. ADDRESS OF OPERATOR P. 0. Box 68, Hobbs, New Mexico 88240 4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.) AT SURFACE: 1650' FNL X 1653' FWL, Unit F AT TOP PROD. INTERVAL:	Scoggin Draw Morrow Gas  11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  11-18-27  12. COUNTY OR PARISH 13. STATE Eddy  NM
AT TOTAL DEPTH:  16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA  .	14. API NO.  15. ELEVATIONS (SHOW DF, KDB, AND WD)  3587 RDB
REQUEST FOR APPROVAL TO:  SUBSEQUENT REPORT OF:  TEST WATER SHUT-OFF	(NOTE: Report results of multiple completion or zone change on Form 9–330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Moved in service unit 1-11-83. Killed well with 50 bbls 10# 2% KCL water. Pulled tubing and packer. Ran packer and 2-7/8" tubing and tested to 8000 psi. Packer set at 9515'. Fractured with 20,000 gal 40# gelled 2% KCL water and 10,000 gals. CO2 carrying 20,500# sand. Flushed with 71 bbl 10# 2% KCL water. Flowed well on 32/64" choke for 1/2 hrs. at 75 psi. Flowed 3 hrs. on 48/64" choke at 50 psi. Well died. Pulled tubing and packer. Ran 2-3/8" tubing, F-nipple, 2-3/8" tubing, packer, on-off tool and 2-3/8" tubing. Packer set at 9432' and tailpipe landed at 9527'. Swabbed 8 hrs. and recovered 60 BLW with Strong show of gas. Moved out service unit 1-16-83. Moved in and rigged up Swab unit 1-16-83. Swabbed 12 days. Moved out Swab unit 2-1-83. Connected well to gas sales line 2-2-83. Flowed 144 hrs. and produced 0 BF and 701 MCF. Last 24 hrs flowed 0 BF and 120 MCF. Returned well to production.

Substitute Blattery Raive: Mathe Vand Type US	SP 1-CMH 1-W. Stafford, HOUset@	 Ft
18. I hereby gerryly that the foregoing is true	e and correct	
	TITLE Ast. Adm. Analyst DD C 1887	
	Thi ACCEPTED FOR RECORDS 0)	
APPROVED BY	TITLE PAPE DATE FER 1 6 1092	
CONDITIONS OF APPROVAL, IF ANY:	.HI 71983	
	JUL 1 1000 Bill b SAS	

See Instructions on Reverse Side ROSWELL, NEW MEXICO

RODWELL, NEW MEXICO

	ar a control of the		Form approved
Form 3160-5 November 1983)	UN! LD STATES	ia, NM 88210 submit in Tripl re.	Form approved.  Budget Bureau No. 1004-0135  Expires August 31, 1985
Formerly 9231	PARTMENT OF THE INTE	<b>_</b>	5. LEASE DESIGNATION AND SERIAL NO.
RECEIVED BY	BUREAU OF LAND MANAGEME		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
FEB. 28 SUNDRY	proposals to drill or to deepen or plu	ON WELLS g back to a different reservoir. a proposals.)	٠.
OIL O. C. D.	OTHER Recompletion		7. UNIT AGREEMENT NAME
amsco Prode	ection Company		Malco S Federal
3. ADDRESS OF OPERATOR	Hobbs Dry 882	,40	9. WELL NO.
4. LOCATION OF WELL (Report 1 See also space 17 below.)	location clearly and in accordance with a	ny State requirements.*	10. RIELD AND POOL, OR WILDCAT
At Burface 1650	FNL X 1653 FWL		11. SRC., T., R., M., OR MES. AND
(SE/4.	, NW/4, Unit F)		11-18-27
14. PERMIT NO.	15. ELEVATIONS (Show whether 3587 RDB		12. COUNTY OF PARISH 13. STATE
16. CH	neck Appropriate Box To Indicate	Nature of Notice, Report, or C	Other Data
NOTICE	OF INTENTION TO:	BUBSEQ	UENT REPORT OF:
TEST WATER SHUT-OFF FRACTURE TREAT	PULL OR ALTER CASING MULTIPLE COMPLETE	WATER SHUT-OFF FRACTURE TREATMENT	REPAIRING WELL ALTERING CASING
SHOOT OR ACIDIZE  REPAIR WELL	ABANDON* CHANGE PLANS	SECOTING OR ACIDIZING (Other)	ABANDONMENT*
(Other)		Completion or Recomp	of multiple completion on Well letion Report and Log form.)
17. DESCRIBE PROPOSED OR COMPI proposed work. If well in nent to this work.) *	LETED OPERATIONS (Clearly state all perticised in directionally drilled, give subsurface to	nent details, and give pertinent dates, ocations and measured and true vertice	including estimated date of starting any al depths for all markers and zones perti-
	eased skt. and spull	ed llg. Han east	viron bridge plug
and set at 9495	! Pumped 5 sx Cla	iss H cmr. Spotted	gel plug 9432"-
9683 . Sported 25	ex class Hyplug	7863-76131. Pw	elled tog. Perfd
7046-7062,7090	7-7100, 7382-738	38 with 45PF. Ka	n tog V, plet and ser
retrievable brid	ge soluge at 7444.	Pulled they and	set bell at 7280.
Swood. acidigla w	with 1000 guls. 15 and reset at 684	% NEFE HCL and 2'. Iested webs. to	500 policy of
Swood necessition of			500 PSI and OK. Swbd.
Ser reviewance in	in show and a	eidered with 500	10 galo gelled 15%
NE FE HAI Japond	Radio actual material.	Han atter - treater	Tind purply . Swbd .
			head stating niggle
	Cleaned out pand		
J+5-BEM, C 1-JRB	1-FJN 1-GCC 2-	nmoco, A	V
18. I hereby certify that the fo	Coble TITLE	lministrative anal	2-22-85
(This space for Federal or		V	
APPROVED BY CONDITIONS OF APPROV	ALA IF ANY:		DATE
EC	18 2 0 1925		Post 2-85
1.6		ons on Reverse Side	3- P+ PT WILL.

Title 18 U.S.C. Section 1001) makes it a crime for any person knowingly and willfully to make to any department or agency of the United States and Market Englisher Englishers of fraudishent statements or representations as to any matter within its jurisdiction.

tail-pipe, tto, and tto, anchor. Seating nipple landel at 7441, and set tto anchor ar 7005' Than while and pmp. MOSU
1-30-85. Built wellhead and connected to flur line on 1-31-85.
Began pmp testing 2-1-85. Pump tested approx. 8 dasp. Lash
24 hrs. pmpd 10 80 × 180 BW × 0 MCF. MISU 2-V1-85.
Pulled world and pmp. Pulled tto, and ran plu., seating nipple and tto. Helicipable bridge plug set at 7150'. Dested
RBP to 1000 F81 and OK. Set plus, las 7073'. Swild. Released plus, han too and latched on to RBP. Pulled tto. Than Cast with

bridge plug and set at 7080'. Kan emt. red. and set at 6962'.
Pumped 16 ex Class H Neat. Heursel out 5 ex emt. POOH.

Brilled out cout. to 7070'. Han ttog. and tagged cast vion bridge plug at 7080'. Pulled ttog., brill collar and bit. Than omt.

retainer and set at 6955'. Squeezel 125 ex Class H omt and.
10 ex below retainer and 103 ex aformation. Theversel out 12 squal pulled ttog.

The Control of the Co	Form approved.
Form 316025 UN .ED STATES SUBMIT IN TRIP). 4TE-	Budget Bureau No. 1004-0135 ' Expires August 31, 1985
FORECEPTED 31" DEPARTYMENT OF THE INTERIOR verse side)	5. LEASE DESIGNATION AND BERIAL NO.
BUREAU OF LAND MANAGEMENT	LC-06/858
MAR 13 SUNDRY NOTICES AND REPORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  Use "APPLICATION FOR PERMIT—" for such proposals.)	
APRICE	7. UNIT AGREEMENT NAME
OILANTESA, OPPLE	
2. NAME OF OPERATOR	8. FARM OR LEASE NAME
amoco Production Company	Malco > Federal
3. ADDRESS OF OPERATOR	9. WELL NO.
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*	10. FIELD AND POOL, OB WILDCATA
See also space 17 below.) At surface /650 FNL X /653 FWL	Challe Bluff bollowns
	11. SEC., T., R., M., OZ BLK. AND
(Unit F, SE/4 NW/4)	
14. PERMIT NO.   15. ELEVATIONS (Show whether DF. RT. GR. etc.)	11-18-27
14. PERMIT NO.  15. ELEVATIONS (Show whether DF, RT, GR, etc.)  3587 ADB	12. COUNTY OR PARISH 13. STATE
18. Check Appropriate Box To Indicate Nature of Notice, Report, or O	ther Data ^V
NOTICE OF INTENTION TO:	NT EMPORT OF:
TEST WATER SHUT-OFF PULL OR ALTER CASING WATER SHUT-OFF	REPAIRING WELL
FRACTURE TREAT MULTIPLE COMPLETE FRACTURE TREATMENT	ALTERING CASING
SHOOT OR ACIDIZE ABANDON SHOOTING OD ACIDIZING	MANDONMENT*
(Other) CHANGE PLANS (Other) (Other) (Other)	of multiple completion on Well
17. DESCRIBE PROPUSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates	tion Report and Log form.) ncluding estimated date of starting any
proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical nent to this work.)*	depths for all markers and sones perti-
This to import you that a solution loom	a tartina lessarea
This is to inform you that production from pump	sunday signer on
the Males 5 Federal 16. 1 2-26-85. Produced 9 BC	150 bblaw, and
o gas. The subject well is currently leing recor	ndeled from the
in the Alberta	
Morrow to the way camp.	
0 /	
	•
	·
0+5 BLM,R 1-JRB 1-FJN 1-GCC CC-BLM,C	
D+5 BLIMA - STORE TO THE STORE THE S	•
18. I hereby certify that the foregoing is poue and correct	
SIGNED Hary Clark TITLE UST. Clamin (Inaly	N DATE 2-27-85
(This space for Federal or State office use)	
ACCEPTED FOR BEACAS	
APPROVED BY 4CCEPTED FOR RECORD TITLE	DATE
CONDITIONS OF APPROVAL OF ANY:	
MAR 1.2 1968	
AA	

*See Instructions on Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fittifious or fraudifem statements or representations as to any matter within its jurisdiction.

Form 3160-5	µ	TED STATES	SUBMIT IN TR CAT	Form approved. Budget Bureau	No. 1004-0135 /SI
November 1983) Formerly 9-331)	DEPARTMLN	T OF THE INTERIO	- Inches	Expires August	
	· · · · · · · · · · · · · · · · · · ·	LAND MANAGEMENT		LC - 067	858
		AND REPORTS O drill or to deepen or plug bac FOR PERMIT—" for such proj	to a different reservoir.	and the state of t	OR TRIBE NAME
OIL GAS WELL	OTHER		ARTESIA, OFFICE	. UNIT AGREEMENT NA	ME
2. NAME OF OPERATOR	2 Disting	Com Rames /	Drawer DD	ISSTON ARM OR LEASE NAME	10 0
3. ADDRESS OF OPERATO	68 Hold	ly nm 88240	Artesia, NM 88210	9. WHILL NO.	acios_
4. LOCATION OF WELL ( See also space 17 be At surface	low.)	and in accordance with any St	ate requirements.*	10. FIELD AND POOL,	WILDCAT
At Burrace	1650 FNLX	1653 FWL		11. SBC, T., B., M. P.	Woy Camp
	Clinit F	, SE/4 NW/4)		SURVEY OF ACEA	,
14, PERMIT NO.	15.	ELEVATIONS (Show whether DF, R	T, GR, etc.)	11-18-27 12. COUNTY OR PARISH	
		3587 RDB		Eddy	nm
16.	Check Appropr	iate Box To Indicate Na	ture of Notice, Report, o	r Other Data	
	NOTICE OF INTENTION T	0:	AUBA	BEQUENT REPORT OF:	
TEST WATER SHUT-	[]	R ALTER CASING LE COMPLETE	WATER SHUT-OFF	REPAIRING T	
SHOOT OR ACIDIZE	ABANDO		FBACTUBE TREATMENT SEGOTING OR ACIDIZING	ALTERING C.	
REPAIR WELL	CHANGE	PLANS	(Other) Status	o Gosate	
(Other)	B COMPLETED OPERATION	S (Clearly state all pertinent	Completion or Reco	ults of multiple completion supletion Report and Log for	rm.)
proposed work. I nent to this work.)	r wen is directionally (	frilled, give subsurface location	ns and measured and true ver	rtical depths for all marker	and sones perti-
illo dont	ant rotains	r to 7071 are	sessure ten	to 1000	Dsi for
miles our c	- 11 1	1 1 1		in Octob	a la como de
min, OK.	Drilled on	t and cleaned	Vous to 1504	. Cyrculated	cleanard
4 Ran Det	Luction es	inament, tai	Poise landed	at 1432	Began
. Had pu	2 22 8	De tot	1 20 da	us last 2	4 km
mp lesun	g 2-25-85	Jump reste	a apr at an	yo, rusi	
made OB	0. 110 Bu	, and o mo	F. Well is	currently so	nutin
	<u>.</u>	, -			
r evaluau	ion.				
		** **			•
		1-000			
BLM, C 1-	JRB 1-FJN	1-600			
18. I hereby certify that	the foregoing is true	and correct	101.00		
SIGNED AND	y C. Clark	TITLE USA	. almin . Chaly	1 DATE 4-2	-85
	eral or State office use)				
APPROVED BY	CCEPTED FOR R	ECORD TITLE		DATE	
CONDITIONS OF A	PPROVAL, IP ANY				
•	APR 1 1 198	<b>15</b>			
		*See Instructions o	n Reverse Side		

Title 18 U.S.C. Section 1001, 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.

Form 3160-4		. <del></del> .	NM OI	L CON	S. COMMI	SSTON	, <u> </u>		Form a	pproved	. 6
RECEIVED3 BY			ED STAKE	FEB)	SUBM	IT IN	DU1 .	TE•	Budget Expire	Bureau	No. 1004-0137 st 31, 1985
RECEIVED OF	DEPAR	RTMENT	OF TH	Es IN	4E8864	₹	Struc	other in-	1		N AND SERIAL NO
MAY 13 1985			LAND MANA				reve	rse side)			
	ADI TELON	I OD DEC	OLADI ETI	<u> </u>		4 > 15		<u> </u>	6. IF INDIAN.	2075	EE OR TRIBE NAM
WELL COL				ON	REPORT	ANL	LO	G *			on Thine Han
ARTESIA, OFFICE	"	ETAL WE		4 T	Other				7. UNIT AGRE	EMENT	NAME
NEW [		eor _ r	TG X DIFF						 		
2. NAME OF OPERAT	OVER LEE	N L DA	CK 25 REST	(1L. L_J	Other				S. FARM OR	h 11 .	_
Amoco	PRADIN	TIME (	LOMPANO	L MARKET TO					MALCO 9. WELL NO.	<u>S_1</u>	EDERAL
3. ADDRESS OF OPER	ATOR		JON IN PAR	<u>.                                    </u>					1		
P.O. B	N 68	HOBBS	NM 8	824	D				10. FIELD AN	D POOL,	OR WILDCAT
4. LOCATION OF WEL	ı, (Report loca) よらの「FNL	tum eleariu and	I'm occordance	with an	y State requi	rements	) *		Chalk B	luff	Wolfcamo
At top prod into									11. SEC., T., F OR AREA	R., M., OR	BLOCK AND SURVE
At top prod inte	rval reported t	below	'''				•				
At total depth									11-18	-27	
ŧ			14. PER	MIT NO.		DATE IS	SSUED		12. COUNTY C	OR .	13. STATE
15. PATE STREET	16 p.m.	DELCTION 1 1	DATE COMPL. (						EDDY		N.M
1-21-85	TO. DATE 1.D.	REACHED 11.	DATE COMPL. (	Ready to	o prod.)			DF. RKB, E	T, GR, ETC.)	19. EL	EV. CASINGHEAD
20. TOTAL DEPTH, MD 4	TVD   21. PL	UG, BACK T.D., N	(D A TVD   1 22	IF WILL	TIPLE COMPL		358 23. int		DB		
10.168'		76131		HOW M	ANT.	"		LLED BY	ROTARY TOOL	.s I	CABLE TOOLS
24. PRODUCING INTER	AL(S), OF THE	S COMPLETION-	- TOP, BOTTOM.	NAME (N	ID AND TVD)			<del>-&gt;</del> !			WAS DIRECTIONAL
1 1	_ /	â									SURVEY MADE
7046 26. TYPE ELECTRIC A	7388	Wolfcar	np								No
_ CBL	OTHER LOGS	RUN	•							27. WAS	WELL CORED
28.		<del></del>	CASING RECOI	UD (Par	ont all at-						No
CASING SIZE	WEIGHT, LB		SET (MD)	но	LE SIZE	set in		MENTING	RECORD		AMOUNT PULLED
11-3/4"	47#	- 10	xxo'	15	5"	970	SX				CIRC
B-5/8"	32#	<b>+</b> 6.	348'	11			SX		1/ 1/		MKNOWN
5-1/2"		# 6277	<u>'- 10, 138'</u>	7	78"	85	SX E				7165'
29.	l	LINER RECO	ORD 1		<del></del>	1	30,		University of the last		····
SIZE	TOP (MD)	BOTTOM (MI		MENT*	SCREEN (M		SIZE		UBING RECO		
								;	METH BEI (MI	''- -	ACKER SET (MD)
										-	
7014	Interval, s	nze and number	1200	^ ′	32.	ACIE	. SHOT	, FRACTI	URE, CEMENT	SQUEE	ZE, ETC.
7046-62	, 1040	- 1100	, 1382 -	88	DEPTH IN	TERVAL	(MD)	AMO	OUNT AND KIND		
W/ 4 DPJ	SPF (138	o')			1382	- 00 - 7100	<del>'</del>	1000		VIELE	HCL
					1046	7700					NEFE HEL
								15%	NEFE		1000 Gal
33.*		Pohio:		PROI	UCTION				13-15	HCL	
7-71-85	N PROL	D ~	v (Flowing, gai	e lift, pu	mping-size	and typ	e of pun	np)	WELL S		Producing or
2-26-85 DATE OF TEST	HOURS TESTED	Pump	IZE PROD'N	FOR	OIL-BBL.				S	hut	- IN
3-18-85	Z4		TEST P	ERIOD	OIL _ RAL.	1	GASMI		WATER—BRL.	1	S-OIL RATIO
FLOW. TUBING PRESS.	CASING PRESSU	BE CALCULATE	ED DIE BI	HI	IAS-	^{₩C} ₩Ç	CEPT	D FO	RECORD	OIL GRAV	VITY-API (CORR.)
		<del></del>	<b>→</b>		!		1	gin	$\circ$ $\perp$		(Conn.)
34. DISPOSITION OF GA.	Sold, used fo	r fuel, vented,	etc.)					v 40	1985	SED BY	
35. LIST OF ATTACHM							M	10	1985		
•											
LOGS Maile 2	1-31-65 hat the foregoi	ng and attache	d information	is compl	ete and corre	CAF	I SRA	D. NL	WEXICO	<u> </u>	
11	1 11	-		/	), . , <b>, ,</b> , ,	u					
signed _ //	mih. 1 des		TIT	LE <u>H</u>	dministrativ	e H	rolyst		DATE	6 N	1AY 1985
							•				-1

*(See Instructions and Spaces for Additional Data on Reverse Side)

Fitle 18 U.S.C. Section 1001, 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.

A+C RIM-C . 1-TPR , 1-FTN, 1-NIG

<b>,</b>	TOP	TRUE VERT, DEPTH		• ÷
GEOLOGIC MARKERS	) I	MEAS, DEPTH	·	
38. GEOI		NAME		•
				`
ed intervals nut-in pressu	ETC.			
thereof, cor wing and sl	CONTENTS,			
and contents tool open, flo	DESCRIPTION, CONTENTS, ETC.			
ies of porosity on used, time				
rval tested, cushic	BOTTOM			
luding depth inte	TOP	\$	(북()) (국· <b>왕</b> ()) ( () () () ()	
drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):	FORMATION			

Form 3160-5 November 1933) Comperly 9-331)  DEPARTME OF THEAINTERIOR verse side)  BUREAU OF LAND MANAGEMENT	Budget Bureau No. 1004-0135 Expires August 31, 1985  5. LEASE DESIGNATION AND SERIAL NO.
SUNDRY NOTICES AND REPORTS ON WELLS  (Do not use this form for proposals to drill or to sepen or plus back to a different Gervoir.  Use "APPLICATION FOR PERM T—" for the proposals of the propos	0. IF INDIAN, ALLUTTEE OR TRIBE NAME
OIL GAS OTHER DXA MAR 17 1986	7. UNIT AGREEMENT NAME  8. FARM OR LEASE NAME
AMOCO PRODUCTION COMPANY  O. C. DC  3. ADDRESS OF OPERATOR  P.O. BOX 68 HOBBS, NEW MEXICO SOZ4U  4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)  Secretary of the property of the	Malco "5" Federal 9. WALL NO.
See also space 17 below.) At surface  1650 ' FML × 1653 ' FWL	10. FIELD AND POOL, OR VILDCAT  AND DESCRIPTION OF THE SURFACE AND SURVEY OF AREA  SURVEY OF AREA  SURVEY OF AREA
(UNIT F, SE/4, NW/4)  14. PERMIT NO.  16. ELEVATIONS (Show whether DF, RT, CR, etc.)  300/5205/0  3587/6/6	12. COUNTY CA TABLE 13. STATE AM
16. Check Appropriate Box To Indicate Nature of Notice, Report, or Or	shor Des
<del>-</del>	ENT REPORT OF:
TEST WATER SHUT-OFF PULL OR ALTER CASING WATER SHUT-OFF FRACTURE TREAT MULTIPLE COMPLETE FRACTURE TREATMENT SHOOT OE ACIDIZE ABANDON* SHOOTING OR ACIDIZING REPAIR WELL CHANGE PLANS (Other)	BEPAIRING WELL  ALTERING CABING  ABANDONMENT®
(Other) (Note: Report results of Completion or Recomplet	of multiple completion on Well tion Report and Log form.)
17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, i proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical nent to this work.) •	
1. MISU 11-25-85 and DHarth rods, pump, and taking.	
2. Ran CIBP and set at 6995!	
3. kan free point log.	10 1
4. LIHa/tubing to 6950' and pumped 80BBha brine gel. Capped C.	TOPWITH 15 SX Class Helement.
5. Displaced holowith 150 BBL brine gel 6. Spotted 405x class theement from 6400-6225! WOC.	Tage of agence to +1711
7. Pulled tuking to 5350' and pumped 26 sx class Comes	
8. Responated 1049-50'W/4DPJSPF. Established circulation	out 11 3/4" casing.
9. Set Cement retainer at 950'. Spaceged a/3505x class Come	of. Circulated 175xout 1134°
Cheng.	
0 + 5 BLM- / , 1 - JRB, 1 -/FJN, 1- CMH  18. I hereby certify that the foregoing is true and correct	
SIGNED HARLE M. HERRY TITLE Administrative Analyst (S	G) DATE 12/5/85
(This space for Federalior State office use)	3-14-59
APPROVED BY TITLE TITLE	Post FD-2
*See Instructions on Reverse Side	3-21-86 P4A

Title 18 U.S.C. Section 1001, 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.

10. Spotted 105x class Coment surface plug.
11. Installed dry hole marker and MOSU 12-3-85.

#### NEW MEXICO OIL CONSERVATION DIVISION P. O. DRAWER DD ARTESIA, NM 88210

DATE December 15,1986

#### NOTICE OF GCNM'S GAS DISCONNECTION:

OPERATOR: Amoco Production Company	
LEASE: Malco "S" Federal	
WELL NUMBER: #1 WELL UNIT LETTER: F	
SECTION: 11 TOWNSHIP: 18 RANGE: 27	
POOL: Scroggin Draw Morrow Chalk Bluff W.	Mano.
DATE WELL DISCONNECTED: 12/15/86	·
GCNM'S STATION NUMBER: 1890-00	

RECEIVED BY

JAN - 5 1987

O. C. D.

ARTRIELS OFFICE

GAS COMPANY OF NEW MEXICO TRANSPORTER

GAS CONTROL SUPERVISOR

cc: Oil Conservation Division P. O. Box 2088 Santa Fe, NM 87501

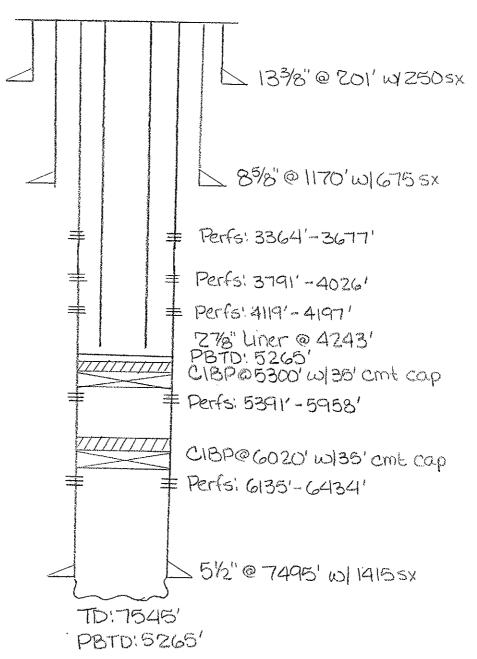
> Tom Sanders - Albuquerque Carolyn Titus - Albuquerque Merle Dennis - Kutz Canyon Oil Conservation file Grady Gist file



### NAVAJO REFINING COMPANY Map ID No. (分う Artificial Penetration Review

OPERATOR Mack Energy Corp	STATUS_ Active Oil
LEASE State H	LOCATION Sec. 2 -T18S-R27E
WELL NUMBER 2	MUD FILLED BOREHOLE NA
DRILLED 10-31-07	TOP OF INJECTION ZONE ~7215
PLUGGED NA	API NO. <u>30-015- 35원/4</u>

REMARKS: Calc. Top of Cement behind 51/2"@Surface.



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

#### State of New Mexico

Form C-101 Permit 60506

#### **Energy, Minerals and Natural Resources**

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

APPLICATION FOR	DEDMIT TO DOLL I	DE ENTED	DEEDEN	DILICPACE	OD ADD A ZONE
APPLICATION FOR	PERMIT TO DRILL	. RE-ENIER	. DEEPEN.	PLUGDAUK.	OR ADD A ZONE

AFFICATIONTOR	APPLICATION FOR PERMIT TO DRIBE, RE-EVIER, DEEPEN, PEUGBACK, OR ADD A ZONE							
1.	1. Operator Name and Address							
Iv.	13837							
	PO BOX 960 ARTESIA , NM 88211	3. API Number						
	ARTESIA, IVIVI 80211							
4. Property Code	5. Property Name	6. Well No.						
303847	STATEH	002						

#### 7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
Н	2	18S	27E	Н	2063	N	441	E	EDDY

#### 8. Pool Information

CHALK BLUFF; WOLFCAMP GAS 96963

#### Additional Well Information

9	100		Zumania wen	IIIIOI IIII IIII		01
9. Work Type New Well			12. Lease Type State	13. Ground Level Elevation 3590		
14. Multiple N	15. Prop	osed Depth	16. Formation Wolfcamp	8	17. Contractor	18. Spud Date 9/20/2007
Depth to Groun	d water		Distance from nearest	fresh water well		Distance to nearest surface water
Pit: Liner: Synthetic Closed Loop Syst	tem 🛮	mils thick	Clay Pit Volume:		ing Method: h Water Brine 1	Diesel/Oil-based Gas/Air

19. Proposed Casing and Cement Program

Туре	Hole Size	Casing Type	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	12.25	8.625	24	360	400	0
Prod	7.875	5.5	17	7313	1300	0

### Casing/Cement Program: Additional Comments

Mack Energy proposes to drill a 12 1/4 hole to 360', run 8 5/8 casing and cement. Drill a 7 7/8 hole to 7313', run 5 1/2 casing and cement. Note: On production string a fluid caliper will be run and will figure cement with 25% excess, attempt to circ.

Proposed Blowout Prevention Program

	<b>F</b>		
Туре	Working Pressure	Test Pressure	Manufacturer
DoubleRam	2000	2000	

of my knowledge and belief.	ation given above is true and complete to the best. Ding pit will be constructed according to	OIL CONSERVATION DIVISION			
NMOCD guidelines, a ge OCD-approved plan	neral permit , or an (attached) alternative	Approved By: Bryan Arrant			
Printed Name: Electronic	ally filed by Jerry Sherrell	Title: Geologist			
Title: Production Clerk		Approved Date: 9/19/2007	Expiration Date: 9/19/2008		
Email Address: jerrys@r	nackenergycorp.com	vid video	-0.20		
Date: 9/11/2007	Phone: 505-748-1288	Conditions of Approval Attac	ched		

Form C-102 Permit 60506

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., Aziec, 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

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number	2. Pool Code	3. Pool Name		
30-015-35814	96963	CHALK BLUFF; WOLFCAMP GAS		
4. Property Code	5. Propert	y Name 6. Well No.		
303847	STAT	EH 002		
7. OGRID No.	8. Operato	or Name 9. Elevation		
13837	MACK ENER	RGY CORP 3590		

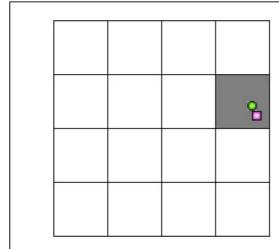
#### 10. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
Н	2	18S	27E		2063	N	441	E	EDDY

#### 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
H	2	18S	27E	H	2300	N	340	E	EDDY
	12. Dedicated Acres 40.00		Toint or Infill	1	4. 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

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.

E-Signed By: Jerry Sherrell Title: Production Clerk Date: 9/11/2007

#### SURVEYOR CERTIFICATION

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.

Surveyed By: Ronald Eidson Date of Survey: 8/28/2007 Certificate Number: 3239

# **Permit Comments**

Operator: MACK ENERGY CORP , 13837 Well: STATE H #002

Well: STATE H #002 API: 30-015-35814

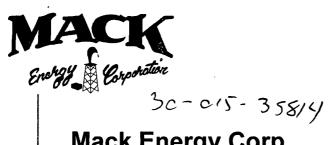
Created By	Comment	Comment Date
LDWSHERRELL	H2S concentrations of wells in this area from surface to TD are low enough that a contingency plan is not required.	9/11/2007

# Permit Conditions of Approval

Operator: MACK ENERGY CORP , 13837 Well: STATE H #002

API: 30-015-35814

OCD Reviewer	Condition
BArrant	Pit construction and closure must satisfy all requirements of your approved plan, O.C.D. Rule 19.15.2.50, and the Pit and Below-Grade Tank Guidelines
BArrant	As noted, operator to drill surface hole wfresh water mud.
BArrant	Cement to cover all oil, gas and water bearing zones.



# Mack Energy Corp.

Eddy County, NM (NAD 27 NME) State H #2 State H #2 Wellbore #1

Plan: Plan #1

# **Standard Planning Report**

11 September, 2007





#### **Scientific Drilling**

Planning Report



0.05 °

atabase: EDM 2003.16 Single User Db

Company: Mack Energy Corp.
Project: Eddy County, NM (NAD 27 NME)

Site: State H.#2 Well: State H.#2 Wellbore: Wellbore #1 Design: Plan #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well State H #2 WELL @ 3606 00ft (KB Elev)

WELL @ 3606.00ff (KB Elev)

Grid Minimum Curvature

Project Eddy County, NM (NAD 27 NME)

Map System: Geo Datum: US State Plane 1927 (Exact solution) NAD 1927 (NADCON CONUS)

0.00 ft

Slot Radius:

NAD 1927 (NADCON CONUS) New Mexico East 3001

Map Zone:

Position Uncertainty:

System Datum:

Mean Sea Level

Grid Convergence:

 Site
 State H #2

 Site Position:
 Northing:
 646,629.20ft Latitude:
 32° 46' 39.510 N

 From:
 Map
 Easting:
 528,184.50ft Longitude:
 104° 14' 29.874 W

Well State H #2 Well Position 0 00 ft 646,629 20 ft 32° 46′ 39.510 N +N/-S Northing: Latitude: 0 00 ft 528,184 50 ft 104° 14' 29.874 W +E/-W Easting: Longitude: Position Uncertainty 0.00 ft Wellhead Elevation: 3,606.00 ft Ground Level: 0 00 ft

18 2 / 2 1 F 13 19 Design Plan #1 Audit Notes: Version: PLAN Tie On Depth: 0.00 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (ft) .se. (ft) ..... (ft) ... (°) 0.00 0.00 0.00 156.92

Plan Sections		553. 1 Po (2) 12	· [10] 表现的。	Mary . Ada	1				AND THE PROPERTY.	
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate (°/100ft)	Build Rate	Turn	TFO	
	おおいたマン		State St.	- 3/14(m)	334 (11) · 41 (41)	(710011)	w (Minorr)	( inodit)		I arget
0.00	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00	0.00	
460 00	0.00	0.00	460.00	0.00	0.00	0.00	0.00	0.00	0 00	
768.78	_ 6.18	156.92	768.18	-15.29	6.52	2 00	2 00	0 00	156 92	
2,854.52	6 18	156 92	2,841.82	-221 71	94.48	0.00	0.00	0.00	0 00	
3,163.30	0.00	0.00	3,150 00	-237 00	101 00	2.00	-2 00	0 00	180.00	
7,313 30	0.00	0 00	7,300.00	-237.00	101.00	0.00	0 00	0.00	0.00	PBHL-State H #1



#### **Scientific Drilling** Planning Report



Database: EDM 2003 16 Single User Db Local Co-ordinate Reference.
Company: Mack Energy Corp. TVD Reference:
Project: Eddy County, NM (NAD 27, NME) MD Reference:
Site: State H #2 North Reference:
Well: State H #2 Survey Calculation Method:
Wellbore: Wellbore: #1
Design: Plan #1

Local Co-ordinate Reference TVD Reference MD Reference North Reference;

Well State H #2
WELL @ 3606.00ti (KB/Elev)
WELL @ 3606.00ti (KB/Elev)
Grid
Minimum Curvature

100 12 2 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1			*A		A STATE OF	-4:XXX	AGE 120-1-120-153	44.0	
Planned Survey		The second of						52 e 7 e 2 a 3 a 5 a 5 a	1052.1.75 % 44.575.673
Transfer Survey			Para Para Para		2 ( F. ) 2 ( F. ) 3 ( F. )		21.54(3) 4 (0) 3 (1)		
					Contract of the second	1000 3-6			
Measured / /			√Vertical .	气更强力物的	**	Vertical :	Dogleg	Bulld	Turn
	clination	Azimuth	Depth	÷N/S	+E/-W	Section	Rate	Rate	Rate
(ft)	(°)	(1)	(ft) (ft)	(ft)	ु (ft) १	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0 00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0 00	0.00	0.00
200.00	0.00	0 00	200.00	0 00	0.00	0.00	0 00	0.00	0.00
300.00	0.00	0 00	300.00	0.00	0.00	0.00	0.00	0.00	0 00
400.00	0.00	0.00	400 00	0.00	0.00	0.00	0.00	0.00	0 00
460.00	0.00	0.00	460.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP 460' Start 2	0°/100'			TO BE WELL OF					
500 00	0.80	156 92	500.00	-0.26	0.11	0.28	2.00	2.00	0.00
600.00	2.80	156.92	599 94	-3.15	1 34	3.42	2.00	2.00	0.00
700 00	4.80	156.92	699.72	-9.24	3.94	10 05	2 00	2.00	0.00
768 78	6.18	156.92	768.18	-15.29	6.52	16 62	2 00	2 00	0.00
EOC hold 6.18°					PHIRESPO			THE REPORT OF THE	
800.00	6.18	156.92	799.22	-18.38	7 83	19 98	0.00	0.00	0.00
900.00	6.18	156.92	799.22 898.64	-18.38 -28.28	7 83 12.05	19 98 30 74	0.00	0.00	0.00
1,000 00	6.18	156.92	998.06	-38.18	16.27	41.50	0.00	0.00	0.00
1,100.00	6.18	156 92	1,097.48	-48.07	20 49	52.26	0.00	0.00	0.00
1,200.00	6.18	156 92	1,196.90	-57 97	24.70	63.01	0.00	0 00	0.00
1,300.00	6.18	156.92	1,296.32	-67.87	28 92	73.77	0 00	0.00	0.00
1,400.00	6.18	156.92	1,395 74	-77.76	33.14	84.53	0 00	0.00	0.00
1,500.00	6.18	156.92	1,495 16	-87.66	37.36	95.29	0 00	0.00	0.00
1,600.00	6 18	156 92	1,594.58	-97.55	41 57	106.04	0.00	0.00	0.00
1,700.00	6.18	156 92	1,694.00	-107.45	45.79	116.80	0.00	0 00	0.00
			•						
1,800.00	6.18 6.18	156.92 156.92	1,793 42 1,892 84	-117.35 -127.24	50.01 54.23	127.56 138.32	0.00 0.00	0.00 0.00	0.00 0.00
1,900.00 2,000.00	6.18	156.92	1,992.26	-127.24	54.23 58 44	149.07	0.00	0.00	0.00
2,100 00	6 18	156.92	2,091.68	-147.04	62 66	159.83	0.00	0.00	0.00
2,200.00	6.18	156.92	2,191.10	-156.93	66 88	170.59	0.00	0.00	0.00
2,300.00	6.18	156.92	2,290.52	-166 83	71.10	181.35	0.00	0.00	0.00
2,400.00	6.18 6.18	156.92 156.92	2,389.94 2,489.36	-176.73 -186.62	75.31 79 53	192.10 202 86	0.00	0.00 0.00	0.00
2,500.00 2,600.00	6 18	156.92	2,588 78	-196.52	83.75	213.62	0.00 0.00	0.00	0.00 0.00
2,700.00	6.18	156.92	2,688.20	-206.41	87.97	224.38	0.00	0.00	0.00
·									
2,800.00	6 18 6 18	156.92 156 92	2,787.62 2,841.82	-216.31 -221.71	92.18 94.48	235.13 241.00	0.00	0.00 0.00	0.00
2,854.52	and the same and the same of	ioo az Kentruman	2,041.02 \$4.7757\$\documents	-221.71 CONTRAPOSIONES	94.40 Basifyiiski 37	241.00 (35): 1890(3/174:57:5)	0.00	0.00 ear.org:::::::::::::::::::::::::::::::::::	0.00
Start Drop 2.0°/1		150 02	2,887.07	ೆ %-(೩೬೪) ಬಿಡ್ಡಿ ಮೊ -225.88	PERMENTAL PROPERTY.	STORESTON AND AND AND AND AND AND AND AND AND AN	· 44 、 5 持续有 (94)	数をもった。またでは	<b>新期組織</b>
2,900.00	5.27 3.27	156.92 156.92		-225.66 -232.72	96.26	245.53	2.00	-2.00 2.00	0.00
3,000.00 3,100.00	1.27	156.92	2,986 79 3,086.71	-236.36	99.18 100.73	252.97 256.92	2.00 2.00	-2.00 -2.00	0.00 0.00
3,163.30	0 00	0.00	3,150.00	-237.00	101.00	257.62	2.00	-2 00	0.00
EOC hold 0.0°		经现在的	STATE THAT THAT					网络红色胡	数据记得数约
3,200 00	0.00	0 00	3,186.70	-237.00	101.00	257.62	0.00	0.00	0 00
3,300.00	0.00 0.00	0 00 0.00	3,286.70	-237.00 -237.00	101.00	257.62	0.00	0.00	0 00
3,400.00 3,500.00	0 00	0.00	3,386.70 3,486 70	-237.00 -237.00	101.00 101.00	257.62 257.62	0.00 0.00	0.00 0.00	0.00 0.00
3,600.00	0.00	0 00	3,586 70	-237.00	101.00	257.62	0 00	0 00	0 00
3,700 00	0.00 0.00	0.00	3,686.70	-237.00	101 00	257.62	0 00	0.00	0.00
3,800.00 3,900.00	0.00	0 00 0.00	3,786.70 3,886.70	-237 00 -237.00	101 00 101.00	257.62 257.62	0 00 0 00	0 00 0 00	0.00
4,000.00	0.00	0.00	3,986.70	-237.00 -237.00	101.00	257.62 257.62	0.00	0.00	0.00 0.00
			•	•					
4,100.00	0 00	0.00	4,086 70	-237.00	101.00	257.62	0.00	0.00	0 00
4,200.00	0.00	0 00	4,186.70	-237.00	101 00	257 62	0 00	0.00	0.00
4,300.00 4,400.00	0.00 0.00	0 00 0.00	4,286.70 4,386.70	-237.00 227.00	101.00	257 62	0 00	0 00	0.00
4,400.00	0.00	0.00	4,300.70	-237.00	101.00	257.62	0.00	0.00	0 00



Well:

Wellbore: Design:

## **Scientific Drilling**

Planning Report



Database: EDM, 2003:16 Single User Db Company: Project: Site: Mack Energy Corp.

Eddy County, NM (NAD 27 NME) State H,#2 State H #2

Wellbore #1. Plan #1

Local Co-ordinate Reference:

TVD Reference: North Reference: Survey Calculation Method: Well State H #2 WELL @ 3606.00ft (KB Elev) WELL @ 3606 OOR (KB Elev) Grid Minimum Curvature

leal ph. +N/-S t) (ft) 486 70 -237.0 586.70 -237.0 686.70 -237.0 886.70 -237.0 986.70 -237.0 086.70 -237.0 186.70 -237.0 386.70 -237.0 486.70 -237.0	00 101.00 00 101.00 00 101.00 00 101.00 00 101.00 00 101.00 00 101.00 00 101.00	257.62 257.62 257.62 257.62 257.62 257.62 257.62 257.62 257.62 257.62	Dogleg Rate (*/100ft)2 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	Turn Rate (***/100ft)  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00
th +N/S th (ft) 486 70 -237.0 586.70 -237.0 686.70 -237.0 886.70 -237.0 886.70 -237.0 986.70 -237.0 186.70 -237.0 286.70 -237.0 286.70 -237.0 286.70 -237.0	101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00	257.62 257.62 257.62 257.62 257.62 257.62 257.62 257.62 257.62 257.62 257.62	Rate (*100ft): 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 0.0	Rate (*/100ft) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.
(ft) 486 70 -237.0 586.70 -237.0 686.70 -237.0 886.70 -237.0 886.70 -237.0 986.70 -237.0 986.70 -237.0 986.70 -237.0 286.70 -237.0 286.70 -237.0	101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00	257.62 257.62 257.62 257.62 257.62 257.62 257.62 257.62 257.62 257.62	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
486 70 -237.0 586.70 -237.0 686.70 -237.0 786 70 -237.0 886.70 -237.0 986.70 -237.0 986.70 -237.0 286.70 -237.0 286.70 -237.0 286.70 -237.0	101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00 101.00	257.62 257.62 257.62 257.62 257.62 257.62 257.62 257.62 257.62 257.62	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 0.0
586.70 -237.0 686.70 -237.0 786.70 -237.0 886.70 -237.0 986.70 -237.0 086.70 -237.0 186.70 -237.0 286.70 -237.0 386.70 -237.0	00 101.00 00 101.00 00 101.00 00 101.00 00 101.00 00 101.00 00 101.00 00 101.00	257.62 257.62 257.62 257.62 257.62 257.62 257.62 257.62	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
686.70 -237.0 786.70 -237.0 886.70 -237.0 986.70 -237.0 086.70 -237.0 186.70 -237.0 286.70 -237.0 286.70 -237.0	00 101.00 00 101.00 00 101.00 00 101.00 00 101.00 00 101.00 00 101.00 00 101.00	257 62 257.62 257.62 257.62 257.62 257.62 257.62 257.62	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
786 70 -237.0 886.70 -237.0 986.70 -237.0 086.70 -237.0 186.70 -237.0 286.70 -237.0 386 70 -237.0	00 101 00 00 101.00 00 101 00 00 101 00 00 101 00 00 101 00 00 101 00	257.62 257.62 257.62 257.62 257.62 257.62 257.62	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
886.70 -237.0 986.70 -237.0 086.70 -237.0 186.70 -237.0 286.70 -237.0 386.70 -237.0	00 101.00 00 101 00 00 101 00 00 101 00 00 101 00 00 101 00	257.62 257.62 257.62 257.62 257.62	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0 00 0.00 0.00
986.70 -237.0 086.70 -237.0 186.70 -237.0 286.70 -237.0 386.70 -237.0	00 101 00 00 101 00 00 101 00 00 101 00 00 101 00	257 62 257.62 257.62 257 62	0.00 0.00 0.00	0.00 0.00 0.00	0 00 0.00 0.00
086.70 -237.0 186.70 -237.0 286.70 -237.0 386.70 -237.0	00 101 00 00 101 00 00 101 00 00 101 00	257.62 257.62 257 62	0 00 0.00	0.00 0.00	0.00 0.00
186.70 -237.0 286.70 -237.0 386.70 -237.0	00 101 00 00 101 00 00 101 00	257.62 257 62	0.00	0.00	0.00
286.70 -237.0 386.70 -237.0	00 101 00 00 101 00	257 62			
386 70 -237.0	00 101 00		0.00	0.00	
386 70 -237.0	00 101 00				0.00
		257.62	0.00	0.00	0.00
	00 101.00	257.62	0.00	0.00	0.00
586.70 -237.0	00 101.00	257.62	0.00	0.00	0.00
686 70 -237.0	00 101.00	257.62	0.00	0.00	0 00
786 70 -237.0	00 101.00	257.62	0.00	0.00	0 00
886 70 -237.0	00 101 00	257.62	0 00	0.00	0.00
	00 101.00	257.62	0.00	0 00	0 00
086 70 -237.0	00 101.00	257.62	0.00	0.00	0 00 .
186.70 -237.0	00 101.00	257 62	0 00	0.00	0.00
286.70 -237	00 101.00	257.62	0 00	0.00	0.00
386.70 -237.0	00 101.00	257 62	0.00	0 00	0 00
486.70 -237.0	00 101.00	257.62	0.00	0 00	0.00
586.70 -237.0	00 101.00	257 62	0.00	0.00	0.00
686.70 -237 (	00 101.00	257.62	0 00	0.00	0.00
786.70 -237.6	00 101.00	257.62	0.00	0.00	0.00
886.70 -237.0	00 101 00	257.62	0.00	0 00	0.00
986 70 -237.0	00 101.00	257 62	0.00	0.00	0.00
086.70 -237.0	00 101.00	257.62	0.00	0.00	0.00
186.70 -237.0	00 101.00	257.62	0.00	0 00	0.00
286.70 -237	00 101.00	257.62	0 00	0.00	0.00
300.00 -237.0	00 101.00	257 62	0.00	0.00	0.00
6 C 1 2 3 4 5 6 7 6 9 C 1 2 3	986 70 -237. 986 70 -237. 186.70 -237. 186.70 -237. 186.70 -237. 186.70 -237. 186.70 -237. 186.70 -237. 186.70 -237. 186.70 -237. 186.70 -237. 186.70 -237. 186.70 -237. 186.70 -237. 186.70 -237. 186.70 -237. 186.70 -237.	986 70 -237.00 101.00 986 70 -237.00 101.00 186.70 -237.00 101.00 186.70 -237.00 101.00 186.70 -237.00 101.00 186.70 -237.00 101.00 186.70 -237.00 101.00 186.70 -237.00 101.00 186.70 -237.00 101.00 186.70 -237.00 101.00 186.70 -237.00 101.00 186.70 -237.00 101.00 186.70 -237.00 101.00 186.70 -237.00 101.00 186.70 -237.00 101.00 186.70 -237.00 101.00 186.70 -237.00 101.00 186.70 -237.00 101.00 186.70 -237.00 101.00 186.70 -237.00 101.00	986 70         -237.00         101.00         257.62           986 70         -237.00         101.00         257.62           186.70         -237.00         101.00         257.62           286.70         -237.00         101.00         257.62           386.70         -237.00         101.00         257.62           486.70         -237.00         101.00         257.62           586.70         -237.00         101.00         257.62           586.70         -237.00         101.00         257.62           386.70         -237.00         101.00         257.62           386.70         -237.00         101.00         257.62           386.70         -237.00         101.00         257.62           386.70         -237.00         101.00         257.62           386.70         -237.00         101.00         257.62           386.70         -237.00         101.00         257.62           386.70         -237.00         101.00         257.62           386.70         -237.00         101.00         257.62           386.70         -237.00         101.00         257.62           386.70         -237.00         10	986 70         -237.00         101.00         257.62         0.00           986 70         -237.00         101.00         257.62         0.00           186.70         -237.00         101.00         257.62         0.00           286.70         -237.00         101.00         257.62         0.00           386.70         -237.00         101.00         257.62         0.00           486.70         -237.00         101.00         257.62         0.00           586.70         -237.00         101.00         257.62         0.00           586.70         -237.00         101.00         257.62         0.00           786.70         -237.00         101.00         257.62         0.00           786.70         -237.00         101.00         257.62         0.00           786.70         -237.00         101.00         257.62         0.00           786.70         -237.00         101.00         257.62         0.00           786.70         -237.00         101.00         257.62         0.00           786.70         -237.00         101.00         257.62         0.00           786.70         -237.00         101.00         257.62	1866 70         -237.00         101.00         257.62         0.00         0 00           186 70         -237.00         101.00         257.62         0.00         0.00           186 70         -237.00         101.00         257.62         0.00         0.00           286 70         -237.00         101.00         257.62         0.00         0.00           386 70         -237.00         101.00         257.62         0.00         0.00           486 70         -237.00         101.00         257.62         0.00         0.00           586 70         -237.00         101.00         257.62         0.00         0.00           586 70         -237.00         101.00         257.62         0.00         0.00           786 70         -237.00         101.00         257.62         0.00         0.00           786 70         -237.00         101.00         257.62         0.00         0.00           786 70         -237.00         101.00         257.62         0.00         0.00           786 70         -237.00         101.00         257.62         0.00         0.00           786 70         -237.00         101.00         257.62         0.00<

Target Name htt/miss target Dip	A	) Dir.	TVD (ft)	Carrier Park	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL-State H #1 - plan hits target - Circle (radius 10.00)	0 00	0.00	7,300.00	-237.00	101.00	646,392.20	528,285 50	32° 46′ 37.164 N	104° 14' 28.693 W
South HL-State H #1 - plan misses by 14.14ft at - Rectangle (sides W0.00			7,300.00 .00 TVD, -23	-247.00 7 00 N, 101.00	111 00 (E)	646,382.20	528,295 50	32° 46' 37.065 N	104° 14' 28.576 W
East HL-State H #1 - plan misses by 14.14ft at - Rectangle (sides W800.0			7,300.00 .00 TVD, -23	-247.00 7.00 N, 101 00	111 00 (E)	646,382 20	528,295.50	32° 46' 37.065 N	104° 14' 28.576 W

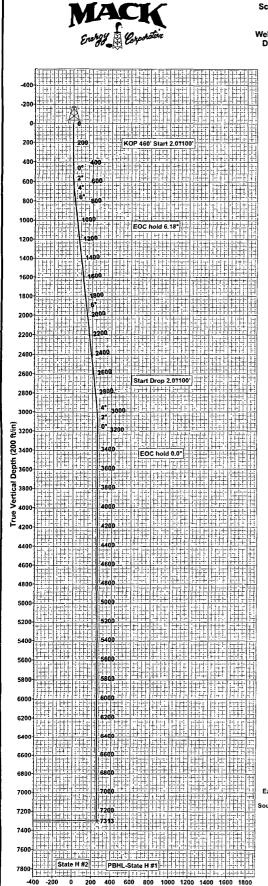


### Scientific Drilling

Planning Report



Plan Annotations  Measured Depth ((1)	Vertical Depth	Local Coordin	nates +E/-W	Comment
460.00	460.00	0.00	0.00	KOP 460' Start 2.0°/100'
768.78	768.18	-15.29	6.52	EOC hold 6.18°
2,854.52	2,841.82	-221.71	94.48	Start Drop 2.0°/100'
3,163.30	3,150 00	-237.00	101.00	EOC hold 0.0°

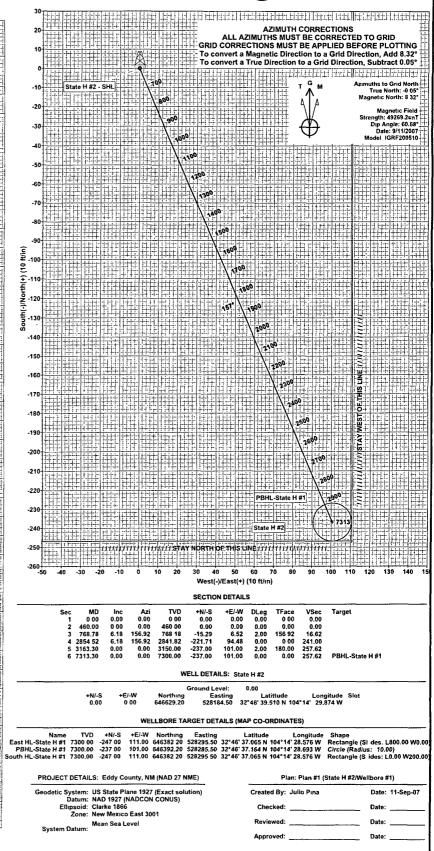


Vertical Section at 156.92° (200 ft/in)

Scientific Drilling for Mack Energy Corp. Site: Eddy County, NM (NAD 27 NME) Well: State H #2

Well: State H #2 Wellbore: Wellbore #1 Design: Plan #1





Subtitit 3 Copies To Appropriate District Office	State of New Mexico	Form C-103
District I 1625 N French Dr., Hobbs, NM 88240	Energy, Minerals and Natural Resources	May 27, 2004 WELL API NO.
District 11	OIL CONSERVATION DIVISION	30-015-35814
1301 W Grand Ave, Artesia, NM 88210 <u>District III</u>	1220 South St. Francis Dr.	5. Indicate Type of Lease STATE  FEE
1000 Rio Brazos Rd , Aztec, NM 87410 District IV	Santa Fe, NM 87505	6. State Oil & Gas Lease No.
1220 S St Francis Dr, Santa Fe, NM 87505		B-9391
SUNDRY NO	TICES AND REPORTS ON WELLS	7. Lease Name or Unit Agreement Name
DIFFERENT RESERVOIR USE "APPL	OSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A ICATION FOR PERMIT" (FORM C-101) FOR SUCH	State H
PROPOSALS)  1. Type of Well: Oil Well	Gas Well 🛛 Other	8. Well Number 2
2. Name of Operator		9. OGRID Number
	ergy Corporation	013837
3 Address of Operator	x 960 Artesia, NM 88211-0960	Chalk Bluff Wolfcamp
4 Well Location	A 700 Micsia, 1111 00211-0700	Chair Dian Woncamp
Unit Letter H	feet from theNorth line and	441 feet from the East line
Section2	Township 18S Range 27E	NMPM County Eddy
	11. Elevation (Show whether DR, RKB, RT, GR, etc.	c.) (1) (1) (2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4
Pit or Below-grade Tank Application	or Closure	
	vaterDistance from nearest fresh water wellD	vistance from nearest surface water
Pit Liner Thickness: mi		Construction Material
12. Check	Appropriate Box to Indicate Nature of Notice	e. Report or Other Data
	<u>.</u>	-
NOTICE OF II PERFORM REMEDIAL WORK	_	BSEQUENT REPORT OF: DRK ☐ ALTERING CASING ☐
TEMPORARILY ABANDON	<del>-</del>	RILLING OPNS. P AND A
PULL OR ALTER CASING	- MULTIPLE COMPL   -   -   -   -   -   -   -   -   -	
OTHER: Change casing	_	
	pleted operations. (Clearly state all pertinent details, a	and give pertinent dates, including estimated date
	work). SEE RULE 1103. For Multiple Completions: A	
Mack Energy would like to chang	ge the casing string approved on this APD.	
D 11 17 1 (0H1 1 : 000) 1	2.2/01/40//77 40	
	3 3/8" 48# H-40 casing and cement. 8 5/8" 24# J-55 casing and cement.	
	ely 7300', run 5 1/2" 17# L-80 casing and cement.	
F1	, , , , , , , , , , , , , , , , , , , ,	OCT 22 2007
		OCD-ARTESIA
		oob /iiii Loi/i
I havely cortify that the information	chave is two and complete to the heat of well-would	and belief to other order days to the
grade tank has been/will-be constructed of	above is true and complete to the best of my knowledge or closed according to NMOCD guidelines, a general permit	or an (attached) alternative OCD-approved plan
SIGNATURE Jerry W.	Sheyelf TITLE Production Clerk	DATE 10/19/07
Type or print name Jerry W. Sher	rell E-mail address: jerrys@mack	xenergycorp.com Telephone No (505)748-1288
For State Use Only		OCT 2 2 2007
	IN G. ARRANT	
APPROVED BY: <b>DIST</b> Conditions of Approval (If any):	RICT II GEOLOGISTITLE	DATE



## Mack Energy Corp.

Eddy County, NM (NAD 27 NME) State H #2 State H #2 Wellbore #1

OCT 22 2007 OCD-ARTESIA

Plan: Plan #2

## **Standard Planning Report**

19 October, 2007





#### **Scientific Drilling**

Planning Report



Database: EDM 2003 16 Single User Db Mack Energy Corp

Company: Project:

Eddy County, NM (NAD 27 NME)

Site: State H #2 Well: State H #2 Wellbore #1 Wellbore Plan #2

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well State H #2

WELL @ 3606 00ft (KB Elev) WELL @ 3606 00ft (KB Elev)

Grid

Mınimum Curvature

Project Eddy County, NM (NAD 27 NME)

Map System: Geo Datum:

Map Zone:

Design:

US State Plane 1927 (Exact solution) NAD 1927 (NADCON CONUS)

New Mexico East 3001

System Datum:

Mean Sea Level

State H #2 Site Northing: 646,629 20ft 32° 46' 39 510 N Site Position: Latitude: Easting: 528,184 50ft 104° 14' 29 874 W From Мар Longitude: 0 05 ° Position Uncertainty: 0 00 ft Slot Radius: Grid Convergence:

Well State H #2 Well Position +N/-S 0 00 ft Northing: 32° 46' 39 510 N 646,629 20 ft Latitude: +E/-W 0 00 ft Easting: 528,184 50 ft Longitude: 104° 14' 29 874 W Position Uncertainty 0 00 ft Wellhead Elevation: 3,606 00 ft 0 00 ft Ground Level:

Wellbore Wellbore #1 Magnetics Model Name Field Strength Declination Dip Angle Sample Date (°) (°) (nT) IGRF200510 10/19/2007 8 36 60 68 49,259

Plan #2 Design Audit Notes: Version: Phase: PLAN Tie On Depth: 0 00 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.00 0 00 0 00 156 92

Measured			Vertical			Dogleg	Build	Turn		
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Rate	Rate	Rate	TFO	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)	Target
0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00	
1,250 00	0 00	0.00	1,250 00	0.00	0 00	0 00	0 00	0.00	0.00	
1,785 00	10 70	156.92	1,781.89	-45.82	19 53	2 00	2 00	0 00	156 92	
2,636 01	10 70	156.92	2,618 11	-191 18	81 47	0 00	0 00	0.00	0 00	
3,171 01	0 00	0 00	3,150 00	-237 00	101 00	2 00	-2 00	0.00	180 00	
7,321 01	0 00	0 00	7.300 00	-237.00	101 00	0 00	0 00	0 00	0 00	PBHL-State H #1



### **Scientific Drilling**

Planning Report



Database:

EDM 2003 16 Single User Db

Company: Mack Energy Corp
Project: Eddy County, NM (NAD 27 NME)

Site: State H #2
Well: State H #2

Well: State H #2
Wellbore: Wellbore #1
Design: Plan #2

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference: Survey Calculation Method: Well State H #2

, WELL @ 3606.00ft (KB Elev)

WELL @ 3606 00ft (KB Elev)

Minimum Curvature

Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00
1,150 00	0 00	0 00	1,150 00	0 00	0 00	0.00	0 00	0 00	0.00
8 5/8" Casin	g								
1,250 00	0 00	0.00	1,250 00	0 00	0.00	0 00	0 00	0 00	0 00
KOP 1250' S	tart 2.0°/100'								
1,300 00	1 00	156 92	1,299 99	-0 40	0 17	0 44	2.00	2 00	0 00
1,400 00	3 00	156 92	1,399 93	-3 61	1 54	3.93	2 00	2 00	0 00
1,500 00	5.00	156.92	-1,499 68	-10 03	4.27	10 90	2 00	2 00	0 00
1,600 00	7 00	156 92	1,599 13	-19 64	8 37	21 35	2.00	2 00	0 00
1,700 00	9 00	156.92	1,698 15	-32 45	13.83	35 27	2 00	2.00	0 00
1,785 00	10 70	156 92	1,781 90	-45 82	19 53	49 81	2 00	2 00	0 00
EOC hold 10	).70°								
1,800 00	10 70	156 92	1,796.63	-48 38	20 62	52 59	0 00	0 00	0.00
1,900 00	10 70	156 92	1,894 89	-65 46	27 90	71 16	0 00	0 00	0 00
2,000 00	10 70	156 92	1,993 15	-82 54	35 18	89 73	0 00	0 00	0 00
2,100 00	10 70	156 92	2,091 41	-99 63	42 46	108.29	0 00	0 00	0 00
2,200 00	10.70	156.92	2,189 68	-116 71	49.74	126 86	0 00	0 00	0 00
2,300.00	10.70	156.92	2,287 94	-133 79	57.01	145 43	0 00	0.00	0 00
2,400 00	10 70	156.92	2,386 20	-150 87	64.29	163 99	0 00	0 00	0 00
2,500 00	10.70	156 92	2,484 46	-167 95	71.57	182 56	0.00	0 00	0 00
2,599 99	10 70	156 92	2,582 72	-185 03	78 85	201 13	0 00	0 00	0 00
2,636 01	10 70	156 92	2,618 11	-191 18	81 47	207 81	0 00	0 00	0.00
Start Drop 2	.0°/100'						W. A. J. W. W. W. W.		
2 699 99	9.42	156.92	2,681 11	-201 46	85 85	218 99	2 00	-2 00	0 00
2,799 99	7 42	156 92	2,780 03	-214 93	91 59	233 63	2 00	-2 00	0 00
2,899 99	5.42	156.92	2,879 39	-225 22	95.98	244 81	2 00	-2 00	0 00
2,999 99	3 42	156 92	2,979 09	-232 31	99 00	252 52	2 00	-2 00	0 00
3,099 99	1 42	156 92	3,079 00	-236 19	100 65	256 74	2 00	-2 00	0.00
3,171.01	0.00	0.00	3,150 00	-237 00	101 00	257.62	2 00	-2 00	0 00
EOC hold 0.	0.						****		w w
7,321 01	0 00	0 00	7.300.00	-237 00	101 00	257 62	0 00	0 00	0.00

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL-State H #1 - plan hits target - Circle (radius 10	0 00	0 00	7,300 00	-237 00	101.00	646,392 20	528,285 50	32° 46′ 37 164 N	104° 14' 28.693 W
South HL-State H #1 - plan misses by 1 - Rectangle (sides			7,300 00 0.00 TVD, -2:	-247 00 37 00 N, 101.0	111 00 00 E)	646,382 20	528,295 50	32° 46′ 37 065 N	104° 14' 28 576 W
East HL-State H #1 - plan misses by 1 - Rectangle (sides			7,300 00 0 00 TVD, -2	-247 00 37.00 N, 101.0	111 00 00 E)	646,382.20	528,295 50	32° 46′ 37 065 N	104° 14' 28.576 W



Design:

### **Scientific Drilling**

### Planning Report



EDM 2003.16 Single User Db Database:

Mack Energy Corp Eddy County, NM (NAD 27 NME) State H #2 Company: Project:

Site: Well: State H #2 Wellbore #1 Plan #2 Wellbore:

Local Co-ordinate Reference:

Survey Calculation Method:

TVD Reference: MD Reference:

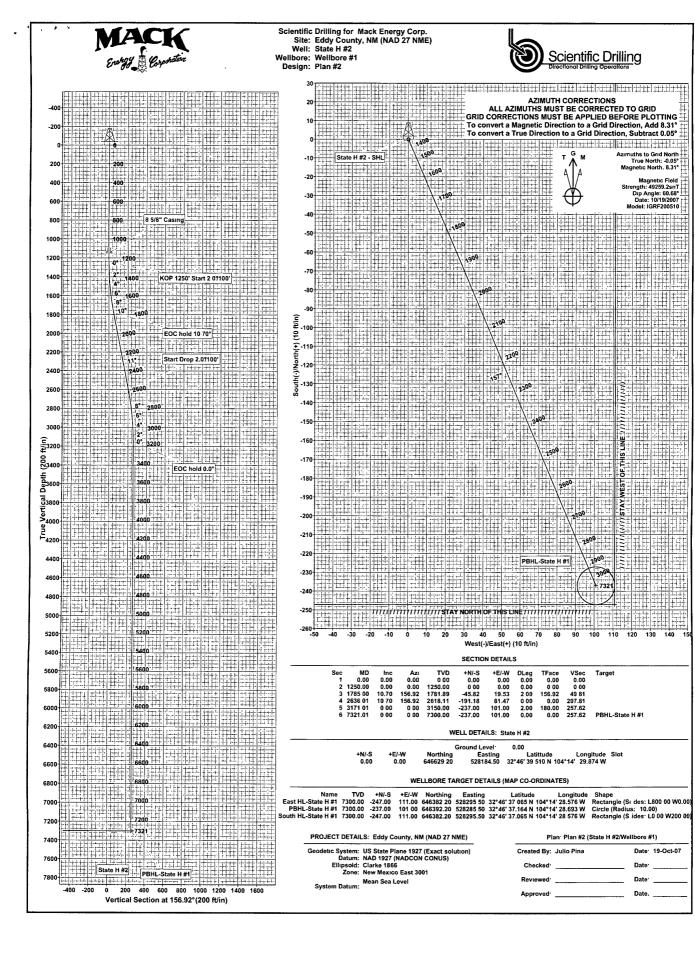
North Reference:

Well State H #2 WELL @ 3606 00ft (KB Elev) WELL @ 3606 00ft (KB Elev) Grid

Mınımum Curvature

Casing Points	'			and a second of the second of			
	Measured Depth	Vertical Depth			Casing Dlameter	Hole Diameter	
	(ft)	(ft)		Name	(ft)	(ft)	
	1,150 00	1,150 00	8 5/8" Casing		8 6250	0 12.25000	

Plan Annotatio	ons				the same described which works a source or many market arrangement and account described and account of a source for the same and the same and the same arrangement of a source for the same and the same arrangement of the s	
	Measured	Vertical	Local Coor	dinatas		
			Local Cool	umates		
	Depth	Depth	+N/-S	+E/-W		
	(ft)	(ft)	(ft)	(ft)	Comment	
	1,250 00	1,250 00	0 00	0 00	KOP 1250' Start 2 0°/100'	
	1,785 00	1,781 90	-45 82	19.53	EOC hold 10.70°	
	2,636 01	2,618 11	-191 18	81 47	Start Drop 2 0°/100'	
	3,171 01	3,150 00	-237 00	101 00	EOC hold 0 0°	
					·	



#### District I State of New Mexico Form C-103 1625 N. French Dr., Hobbs, NM 88240 Permit 65781 Energy, Minerals and Natural Resources Phone:(505) 393-6161 Fax:(505) 393-0720 WELL API NUMBER District II Oil Conservation Division 1301 W. Grand Ave., Artesia, NM 88210 30-015-35814 Phone:(505) 748-1283 Fax:(505) 748-9720 1220 S. St Francis Dr. **Santa Fe, NM 87505** 5. Indicate Type of Lease 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170 S District IV 1220 S. St. Francis Dr., Santa Fe, NIM 87505 6. State Oil & Gas Lease No. Phone:(505) 476-3470 Fax:(505) 476-3462 SUNDRY NOTICES AND REPORTS ON WELLS 7. Lease Name or Unit Agreement Name (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO STATEH A DIFFRENT RESERVIOR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH 8 Well Number PROPOSALS.) 002 Type of Well: ○ 2. Name of Operator 9. OGRID Number MACK ENERGY CORP 13837 10. Pool name or Wildcat 3. Address of Operator PO BOX 960, , 11352 LOVINGTON HWY ARTESIA, NM 88211 4 Well Location 2063 N feet from the line and line 27E 18S NMPM Eddy County Township Range Section 11. Elevation (Show whether DR, KB, BT, GR, etc.) 3590 GR Pit or Below-grade Tank Application or Closure Pit. Type ______ Depth to Groundwater_ _____ Distance from nearest fresh water well_ Distance from nearest surface water_ Pit Liner Thickness: Below-Grade Tank: Volume_ bbls; Construction Material 12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF: PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐ REMEDIAL WORK ALTER CASING TEMPORARILY ABANDON CHANGE OF PLANS COMMENCE DRILLING OPNS. | PLUG AND ABANDON | ■ MULTIPLE COMPL PULL OR ALTER CASING CASING/CEMENT JOB Other: Other: Drilling/Cement X 13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work.) SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion. 10/31/2007 Spud 17 1/2 hole @ 10:00pm. 11/1/2007 TD @ 201. Ran 5jts 13 3/8 H-40 48#@ 201', Cmt w/250sx C+2%CC, circ 104sx, plug down 12:20pm. WOC 18hrs test to 1800#30min, OK. 11/4/2007 TD 12 1/4 hole @ 1165' 11/5/2007 Ran 27jts 8 5/8 J-55 32#@ 1170". Cmt w/475sx C, 200sx C+2%CC, circ 218sx, plug down 3:00am. WOC 12hrs test to 600# 30min, OK. 11/20/2007 TD @ 7545' 11/22/2007 Ran 177jts 5 1/2 J-55 17# @ 7495', Cmt w/530sx C, circ 217sx. 2nd stage 365sx C, 520sx C, plug down 6:55pm, circ 200sx. WOC 12hrs test to 600#20min, OK.

10/31/2007 Spudded well.

#### Casing and Cement Program

Date	String	Fluid Type	Hole Size	Csg Size	Weight Ib/ft	Grade	TOC	Dpth Set	Sacks	Yield Class	1" Opth	Pres Held		Open Hole	
11/01/07	Surf	FreshWater	17.5	13.375	48	H-40	0	201	250	С		1800	0	Y	
11/05/07	Int1	FreshWater	12.25	8.625	32	J-55	0	1170	675	С		600	0	Y	
11/22/07	Prod	CutBrine	7.875	5.5	17	J-55	0	7495	1415	С		600	0	Y	

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been will be constructed or closed according to NMOCD guidelines , a general permit or an (attached) alternative OCD-approved plan. SIGNATURE Electronically Signed TITLE Production Clerk DATE 12/11/2007 Type or print name Jerry Sherrell E-mail address jerrys@mackenergycorp.com Telephone No. 505-748-1288 For State Use Only:

APPROVED BY: TITLE Geologist DATE 12/12/2007 7:46:02 AM Bryan Arrant

Subtitit 3 Copies To Appropriate District Form C-103 State of New Mexico Office May 27, 2004 Energy, Minerals and Natural Resources District I WELL API NO. 1625.N French Dr , Hobbs, NM 88240 30-015-35814 District 11 OIL CONSERVATION DIVISION 1301 W. Grand Ave , Artesia, NM 88210 5. Indicate Type of Lease 1220 South St. Francis Dr. District III STATE 🛛 FEE 1000 Rio Brazos Rd , Aztec, NM 87410 Santa Fe, NM 87505 6. State Oil & Gas Lease No. District IV 1220 S St Francis Dr , Santa Fe, NM SUNDRY NOTICES AND REPORTS ON WELLS 7. Lease Name or Unit Agreement Name (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH State H PROPOSALS) FFR 26 2008 8. Well Number 2 Gas Well Other 1. Type of Well: Oil Well 2. Name of Operator 9. OGRID Number 013837 Mack Energy Corporation 3. Address of Operator I 0. Pool name or Wildcat Red Lake; Glorieta-Yeso P. O. Box 960 Artesia, NM 88211-0960 4. Well Location _feet from the line and feet from the Unit Letter line 18S 27E Eddy Section Township _ Range NMPM County 11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3590' GR Pit or Below-grade Tank Application or Closure Denth Groundwater Distance from nearest fresh water well Distance from nearest surface water Pit Liner Thickness: Below-Grade Tank: Volume _ _ bb1s; Construction Material 12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF: PERFORM REMEDIAL WORK PLUG AND ABANDON REMEDIAL WORK ALTERING CASING | COMMENCE DRILLING OPNS TEMPORARILY ABANDON [ CHANGE PLANS P AND A PULL OR ALTER CASING MULTIPLE COMPL CASING/CEMENT JOB OTHER: Completion OTHER: 13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion. 12/15/2007 Perforated from 6134.5-6434' 57 holes. 12/17/2007 Acidized w/4500 gals 15%. 12/18/2007 RIH w/203 joints 2 7/8 tubing SN @ 6439'. RIH w/2 1/2"x2"x20' pump. 12/26/2007 Set CIBP @ 6020' w/35' cement cap. Perforated from 5789.5-5957.5' 52 holes. 12/27/2007 Acidized w/4500 gals 15%. 12/28/2007 Perforated from 5391-5700.5' 83 holes. Acidized w/5000 gals 15%. 12/29/2007 RIH w/188 joints 2 7/8 tubing SN @ 5965'. RIH w/2 1/2"x2"x20' pump. 1/7/2008 Set CIBP @ 5300' w/35' cement cap. Perforated from 4118.5-4197' 40 holes. 1/8/2008 Acidized w/2000 gals 15%. 1/9/2008 Frac w/8130# liteprop, 68,890# 16/30 sand, 14,046# siberprop, 91,292 gals 30/40# gel. 1/11/2008 RIH w/134 joints 2 7/8" tubing SN @ 4243'. RIH 2 1/2 x 2 x 20' Pump. I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or belowgrade tank has been/will be constructed or closed according to NMOCD guidelines 🗔, a general permit 🗌 or an (attached) alternative OCD-approved plan 🔲 TITLE Production Clerk **SIGNATURE** Type or print name Jerry W. Sherrell E-mail address: jerrys@mackenergycorp.com Telephone No. (575)748-1288 For State Use Only FOR RECORDS ONLY APPROVED BY: TITLE

Conditions of Approval (if any):

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240

<u>District 11</u> 1301 W Grand Avenue, Artesia. NM 88210

State of New Mexico

Energy, Minerals & Natural Resource **FEB** 2 6 2008

Form C-104 Revised Feb. 26, 2007

OCD-ARTSISMIN to Appropriate District Office

1000 Rio Brazos	Rd, Az	tec, NM	87410			20 South St.		,	Opp	-			5 (	Copies
<u>District IV</u> 1220 S. St. Franc	eis Dr., :	Santa Fe.	NM 8750	)5	12	Santa Fe, Ni						AMEND	ED DE	таоа
					AIIC	OWABLE A		HOR	PIZATION	J TO T			ED KE	POKI
Operator n			ress				ND MOT		2 OGRID N		MIND	IOKI		
•			Mack	Energy P.O. Bo	Corpora	ition				mili c	013837			
			Arte:		3x 960 88211-0	960			3 Reason fo	r Filing C	ode/ En	ective Da	te	
4 API Numb	er			Name					-	6 P	ool Code			
30-015-3	5814				]	Red Lake; Glo	rieta-Yeso,	NE				51120	968	<u> </u>
7 Property C 303	ode 847		s Prop	erty Nar	ne	State	H			9 W	Vell Num	ber 2		
H. Surfa		ocatio	)n											
UL or lot no	Section	on Tov	vnship	Range	Lot Idn	Feet from the	North/South	line	Feet from th	e East/	West line	J	County	
H	2		.88	27E		2063	North		441		East	Eddy		-
****		Hole L				B 0 1	N. 110 1		D . C . U	East/	West line		C =	
UL or lot no.	Section	1	vnship	Range	Lot Idn	Feet from the			Feet from th	~	west iiii	1	County	
H 12 Lse Code	∠ " Produ	18S		27E " Gas Conn	ection Date	2300 C-129 Perm	North		340 -129 Effective	East	17 C-	Eddy 129 Expir	ation D	late
S S		P		1/1	1/08	0 120 7 0		16 C	-129 Effectiv	e Date	"	. <b>.</b>		
Ill. Oil a	nd G	as Trai	nsnort			I								
18 Transpoi	rter	45 1141	<u>isport</u>	<del>•15</del>		19 Transpor						²⁰ C	/G/W	
OGRID		NT .	D C			and Ad	dress				_			
015694		Navajo PO Bo:		ıng									0	
				38211-0	159									
036785		DCP M	lidstre:	am LP									G	
030783	' '	4001 P											U	
		Odessa	TX 7	79762										
											L			
	· .													
														L
<u>k</u>														
1W W.11	Cam	1 4 !	D.4.											
IV. Well		22	Ready	Date	1	²³ TD	²⁴ PBTE		²⁵ Perfo	rations	T	²⁶ DHC	, MC	
10/31/20	1	1	1/23/2	007		7545'	5265'		4118.5				,	
27 HC	ole Size			28 Casing	g & Tubir	ng Size	²⁹ De	pth S	et		10 Sa	cks Ceme	nt	
1.7	7 1/2				13 3/8		2	01				250		
	/ 1/2		+		13 3/6			01				230		
12	2 1/4				8 5/8		1	170				675		
											-			
7	7/8				5 1/2		7	195				1415		
					2 7/9		4'	243						
V. Well	Toot I	)oto			2 7/8		4.	243						
31 Date New			Delive	ery Date	33 7	rest Date	34 Test	Lengt	th 15	Tbg. Pre	ssure	³⁶ Cse	. Pressu	ıre
1/14/200	18	1	1/14/20	008	1	/30/08	24 h	oure				552	,	
37 Choke S			38 Oil			Water	40 (					4 1 Tes	st Metho	od
	1		8		1	30	3	0					P	
42 I hereby cer	tify tha	it the ru		e Oil Con	servation	Division have		_	OIL CON <b>\$</b> I	RVATIO	N DIVISI	ON		-
been complied	l with a	ind that	the info	rmation g	given abov				,					
complete to the Signature:		/		• -	nei 1	No	Approved=by:		' ·/ /	111	20 1	, 1		
(		ny	<u> N</u>	<u> </u>	Renal	IK T		XZ	moerl	44	<u>11. W</u>	rilso	ン	

Approval Date:

Title: Production Clerk

Printed name: Jerry W. Sherrell

E-mail Address: jerrys@mackenergycorp.com

Date: 2/25/08

Phone: (575)748-1288

### State of New Mexico Energy, Minerals and Natural Resources Department

Form C-105

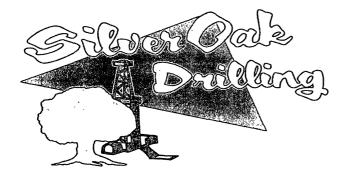
OIL CONSERVATION DIVISION
2040 South Pacheco

Revised 1-l-89

WELL API NO

30-015-35814

DISTRICT II 811 South First, Artesi	ia, NM 88210		Santa F	e, New M	Mexic	o 875	05		5 Indicate T		те 🔀	FEE
DISTRICT III 1000 Rio Brazos Rd , A	Aztec, NM 87410								6 State Oil & 0 B-9391	Gas Lease No		
WELL C	OMPLETION	OR RE	COMPLE	TION REF	ORT	AND L	og					
1 Type of Well	_								7 Lease Nam	e or Unit Agre		lame
OIL WELL	GAS WEI	.L.	DRY	OTHER						•		•
b Type of Completion New Work WELL OVER	Deepen	PLUG BACK		DIFF RESVR 01	HER				State H			
2 Name of Operator							2000		8 Well No			
Mack Energy Corpo	ration				FF	B 26	Zuno		2			
3 Address of Operator					- A	D-AR	TESI	A	9 Pool name	or Wildcat		
P.O. Box 960, Artesi	a, NM 88211-	0960			OU	Par a		ĺ	Red Lake; (	Glorieta-Yes	O. NE	<u> </u>
4. Well Location				,							<del></del>	
Unit Letter	H : 206	Fee	et From The	Not	th	Line	and _	44]	Feet	From The	Ea	Line
Section	2	Tov	wnship	18S	Range	,	27E	N	МРМ	Eddy		County
10 Date Spudded	11 Date TD Rea	ched	12 Date C	ompl (Ready 1	o Prod.)	1	3 Eleva	tions (DF	& RKB, RT, O	GR, etc ) 1	4 Elev	Casınghead
10/31/2007	11/21/20	07	<u> </u>	1/11/08				3.	590' GR			
15 Total Depth	16. Plug l			17 If Multiple Con Many Zones?	npl How			Intervals Drilled By	Rotary To	_	Cable	Γools
7545'		5265'				•	Щ		<u> </u>	Yes		
19 Producing Interval(s) 4118,5-4197'	), of this completion	n - Top, E	Bottom, Name	•						20 Was Direc	tional Su <b>Ye</b> s	=
21 Type Electric and Ot	han I ama Dam								22.11/11		1 68	
Gamma Ray, Neutro	_	eralog, S	Spectral Ga	mma Ray					22 Was W		lo	
23		CA	SING RE	ECORD (I	Renor	t all st	rings	set in	well)			
CASING SIZE	WEIGHT I			TH SET		OLE SIZ			MENTING I	RECORD	AM	OUNT PULLED
13 3/8	48			201		17 1/2			250 sx		7.5	None
8 5/8	32		1170 12 1/4			12 1/4			675 sx			None
5 1/2	17		74	495		7 7/8			1415 s	x		None
24												
SIZE	ТОР		ER RECO	T	. (5) (7)			25		JBING REC		
SIZE	101	- B	OTTOM	SACKS CE	MENI	SCI	REEN		2 7/8	DEPTH 4243		PACKER SET
		<del> </del>						_	2 110	424.	,	
26 Perforation recor	d (interval, siz	ze, and	number)	I		27 A	CID,	SHOT,	FRACTUR	E, CEMEN	Γ, SQU	JEEZE, ETC.
	434', .42, 57 C		,	cmt cap		DEP	TH INTI	ERVAL	AMO	JNT AND KIN	ID MAT	ERIAL USED
	7.5', .42, 92 C			cmt cap					See C-10	3 for detail		
	4118.5-4	197', .42	, 40									
						<u> </u>						
Date First Production		Draduati	an Mathad (I	PRODU Flowing, gas lij			and tune			Wall State	is (Prod	or Shut-in)
1/14/2008		Floducti	ion Menion (7		n, <i>pumpi</i> x2x20'		ини туре	: pump)		Well State	Produ	· ·
Date of Test	Hours Tested		Choke Size	Prod'n Fo		Oil - Bbl		Gas - N	1CF	Water- Bbl	T	Gas - Oıl Ratio
1/30/08	24 hours	.		Test Perio		8		30	F	30	ļ	3750
Flow Tubing Press	Casing Pressure	. (	Calculated 24	- Oıl - Bbl			MCF		ater- Bbl.		ity - AP	I - (Corr.)
		'	Hour Rate	8		30		30				
29 Disposition of Gas (Se	old, used for fuel,	vented, etc							Test V	Vitnessed By		
Sold										Rober	t C. Ch	ase
30 List Attachments												
Deviation Survey and				0.1: 0						<del> </del>		
31. I hereby certify the	µ the informatio . <b>I</b>	n shown	on both side	s of this forn	ı is true	and con	nplete t	o the bes	t of my know	tedge and bei	tief	
Signature Levi	yW.	Sher		rınted lame	Jerry	W. Sher	rell	Titl	e Produ	ction Clerk	Dat	e <u>2/25/08</u>



PO Box 1370 Artesia, NM 88211-1370 (505) 748-1288 FEB 2 6 2008 OCD-ARTESIA

November 30, 2007

Mack Energy Corporation PO Box 960 Artesia, NM 88211-0960

RE:

State H #2

2310' FNL & 990' FEL Sec. 2, T18S, R27E Eddy County, New Mexico

Dear Sir,

The attached is the Deviation Survey for the above captioned re-entered well.

Very truly yours,

Leroy Curry

**Drilling Superintendent** 

State of New Mexico }
County of Eddy }

Notary Public

The foregoing was acknowledged before me this 30th day of November, 2007.

OFFICIAL SEAL
REGINIA L. GARNER
NOTARY PUBLIC - STATE OF NEW MEXICO
My commission expires Qua. 30, 200

	<b>—</b>			
Date	Depth	Dev	Dir	
11/01/2007	133.00	0.50	0.00	
	431.00			
11/02/2007		0.75	0.00	
11/03/2007	700.00	0.50	0.00	
11/04/2007	975.00	1.00	0.00	
11/04/2007	1134.00	0.50	0.00	
11/06/2007	1301.00	1.66	164.90	
11/06/2007	1396.00	3.41	161.90	
11/07/2007	1492.00	5.19	159.10	
11/07/2007		7.21	156.40	
• •	1587.00			
11/07/2007	1683.00	8.51	155.20	
11/07/2007	1778.00	9.94	158.10	
11/07/2007	1873.00	9.56	157.60	
11/08/2007	1968.00	10.53	159.60	
11/08/2007	2064.00	9.83	160.00	
11/08/2007	2159.00	9.69	160.50	
11/08/2007	2350.00	10.78	156.20	
11/08/2007	2445.00	10.67	156.40	
11/08/2007	2540.00	10.54	155.40	
11/08/2007	2604.00	10.43	156.30	
11/09/2007	2699.00	8.58	156.50	
11/09/2007	2794.00	7.39	158.60	
11/09/2007	2984.00	4.30	162.00	
11/09/2007				
	3080.00	2.86	157.10	
11/09/2007	3175.00	1.50	150.00	
11/09/2007	3270.00	0.67	256.70	
11/09/2007	3365.00	0.82	280.50	
11/10/2007	3460.00	0.48	176.00	
11/10/2007	3556.00	0.51	181.00	
11/10/2007	3651.00	0.65	173.10	
11/10/2007	3746.00	0.67	157.20	
11/10/2007	3841.00	0.59	154.20	
11/10/2007	3936.00	0.24	309.30	
11/11/2007	4031.00	0.30	302.30	
11/11/2007	4126.00	0.45	322.60	
11/11/2007	4222.00	1.06	337.40	
11/11/2007	4602.00	1.01	348.10	
11/12/2007	4666.00	1.10	18.68	
• •				
11/12/2007	4729.00	0.53	71.05	
11/12/2007	4824.00	0.27	38.14	
11/12/2007	4920.00	0.71	12.94	
11/12/2007	5015.00	1.19	5.48	
11/12/2007	5110.00	0.82	20.33	
11/12/2007	5206.00	0.28	132.80	
11/13/2007	5301.00	0.54	23.07	
11/13/2007	5396.00	0.34	49.15	
11/13/2007	5491.00	1.12	153.70	
11/13/2007	5586.00	2.14	189.30	
11/13/2007	5660.00	1.31	189.40	
11/13/2007	5681.00	1.09	194.70	
11/13/2007	5745.00	0.67	318.40	
11/13/2007	5839.00	0.24	221.30	
11/14/2007	5935.00	1.41	161.10	
11/15/2007	5998.00	1.01	182.35	
11/16/2007	6188.00	0.34	306.90	
11/16/2007	6474.00	0.11	334.80	
11/16/2007	6570.00	0.15	314.50	
11/17/2007	6664.00	0.27	304.50	
11/17/2007	6759.00	0.45	295.50	
11/17/2007	6854.00	0.46	296.60	
11/17/2007	6949.00	0.59	290.10	
11/17/2007	7044.00	1.09	134.40	
11/18/2007	7140.00	0.38	89.52	
11/18/2007	7235.00	0.57	122.40	
11/18/2007	7382.00	0.81	125.40	

•



FEB 2 6 2008 OCD-ARTESIA

### **MACK ENERGY**

Field: Chalk Bluff

Site: Eddy County, NM

Well: State H #2

Wellpath: DH - Job #32D11071006

Survey: 11/05/07-11/14/07

This survey is cand is supported		best of my knowled eld data.	lge	
	Luhastr	Com.	npany Represe	entative
Notorized this date	/9# of _	December	, 2007.	

Albrah Sue Bynusic Notary Signature

County of Midland State of Texas DEBORAH SUE BYNUM Notary Public, State of Texas My Commission Expires 5/9/08



## **Scientific Drilling International**

### **Survey Report**

Company: MACK ENERGY
Field: Chalk Bluff
Site: Eddy County, NM
Well: State H #2

Wellpath: VH - Job #32K11071013

Date: 12/16/2007 Co-ordinate(NE) Reference: Vertical (TVD) Reference:

Section (VS) Reference: Survey Calculation Method:

Time: 18:34.47 Page: :: Site: Eddy County, NM, Grid North SITE 0.0

Well (0.00N,0.00E,156.92Azi)
Minimum Curvature Db: Sybase

Survey:

11/06/07 KSRG 0'-1143' Scientific Drilling Internatio Keeper;Keeper Gyro Company:

Start Date:

11/06/2007

Engineer: Tied-to:

Madrid w/P&M From Surface

Tool:

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0 00	0.00	359.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.62	77.45	100.00	0.10	0.12	0.53	0.62	0.54	77.4
200.00	0.42	110.33	199.99	0 45	0.11	1.40	0.35	1.40	85.6
300.00	0.37	96.72	299.99	0.86	-0.06	2.06	0.11	2.07	91.5
400.00	0.38	143.78	399.99	1.35	-0.36	2.58	0.30	2.61	98.0
500.00	0.26	212.14	499.99	1.80	-0.82	2.66	0.37	2.78	107.2
600.00	0.28	250.72	599.99	1.91	-1.10	2.30	0.18	2.55	115 4
700.00	0.44	271.18	699.99	1.74	-1.17	1.69	0.20	2.05	124.6
800.00	0.40	74.03	799.98	1.62	-1.06	1.64	0.83	1.96	122.9
900.00	1.01	96.02	899.98	2.09	-1.06	2.85	0.66	3.04	110.3
1000.00	0.95	87.15	999.96	2.81	-1.11	4.56	0.16	4.69	103.7
1100.00	0.56	76.15	1099.95	3.17	-0.95	5.86	0.41	5.94	99.2
1143.00	0.26	86.43	1142.95	3.24	-0.90	6.16	0.72	6.23	98.2



## **Scientific Drilling International**

### **Survey Report**

Company: MACK ENERGY
Field: Chalk Bluff
Site: Eddy County, NM
Well: State H #2

Wellpath: DH - Job #32D11071006

Time: 19:33:59 Page: Site: Eddy County, NM, Grid North

Date: 12/16/2007 T Co-ordinate(NE) Reference: Vertical (TVD) Reference:

SITE 0.0

Section (VS) Reference: Survey Calculation Method: Well (0.00N,0.00E,156.92Azi)
Minimum Curvature Db: Sybase

11/05/07-11/14/07 Survey:

MWD 1206'-7367'
Scientific Drilling Internatio Company: Tool: MWD;MWD

Start Date:

11/05/2007

Engineer: Tied-to:

Hernandez/Biggs/Elger From: Definitive Path

MD	Incl	Azim	TVD	VS	N/S	E/W	DLS	ClsD	ClsA
ft	deg	deg	ft · ·	ft	, ft	ft	deg/100ft	į ft	deg
1143.00	0.26	86.43	1142.95	3.24	-0.90	6.16	0.00	6.23	98.2
1206.00	0.17	46.81	1205.95	3.26	-0.82	6.37	0.27	6.43	97.3
1301.00	1.66	164.91	1300.94	4.57	-2.06	6.83	1.84	7 14	106.7
1301.00								7.14 10.10	126.9
1396.00	3.41	161.92	1395.84	8.75	-6.07	8.07	1.85	10.10	
1492.00	5.19	159.14	1491.57	15.93	-12.84	10 50	1.87	16.59	140.7
1587.00	7.21	156.46	1586.01	26.19	-22.32	14.41	2.15	26.57	147.1
1682.00	8.51	155.25	1680.11	39.18	-34.17	19.74	1.38	39.46	149.9
	0.01	158.14		53.10	-48.32	25 80	1.50	54.77	151.9
1778.00	9 94		1774.87	54.56			1.57		
1873.00	9 56	157.67	1868.50	70.65	-63.22	31.85	0.41	70.79	153.2
1968.00	10.53	159.64	1962.04	87.21	-78.66	37.86	1.08	87.30	154.3
2064.00	9 83	160.07	2056.53	104.15	-94.59	43.71	0.73	104.20	155.2
2159.00	9.69	160.58	2150.15	120.23	-109.75	49.13	0.17	120.25	155.8
2255.00	10 79	160.25	2244.62	137.26	-125.83	54.86	1.15	137.27	156.4
2350.00	10.78	156.23	2337.95	155.02	-142.33	61.44	0.79	155.02	156.6
2445.00	10.67	156.45	2431.29	172.70	-158.52	68.54	0.12	172.70	156.6
2540.00	10.54	155.44	2524.66	190.18	-174.49	75.66	0.24	190.18	156.5
2604.00	10.43	156.37	2587.60	201.82	-185.12	80.42	0.32	201.83	156.5
2699.00	8.58	156.51	2681.29	217.51	-199.50	86.69	1.95	217.52	156.5
2794.00	7.39			217.01		91.74	1.29		156.5
		158.65	2775.36	230.71	-211.69			230.71	
2889.00	5.58	158.12	2869.75	241 43	-221.66	95.68	1.91	241.43	156.6
2984.00	4.30	167.04	2964.40	249.55	-229.42	98.20	1.57	249.55	156.8
3080.00	2.86	157 16	3060.21	255.49	-235.14	99.94	1.63	255.49	156.9
3175.00	1.50	150.04	3155.14	259.10	-238.40	101.48	1.46	259.10	156.9
3270.00	0.67	256.00	3250 13	260.24	-239.61	101.56	1.90	260.24	157.0
3365.00	0.87	280 00	3345.12	259.79	-239.63	100.35	0.36	259.79	157.0
3460.00	0.48	176.03	3440.12	259.79	-239.90	99.71	1.10	259 80	157.4
3556.00	0.51	181.08	3536.11	260 56	-240.73	99.73	0.06	260.57	157.5
3651.00	0.65	173.19	3631.11	261.46	-241.69	99.79	0.17	261.48	157.5
3746.00	0.67	157.21	3726.10	262.54	-242.74	100.07	0.19	262.55	157.€
3841.00	0.59	154.21	3821.10	263.58	-243.69	100.50	0.09	263.60	157 5
2026.00	0.24	200.20	2016.00	000.00	244.00	400.55	0.06	262.04	157 (
3936.00	0.24	309.36	3916.09	263.89	-244.00	100.55	0.86	263 91	157.6
4031.00	0.30	302.31	4011 09	263.51	-243.74	100.19	0.07	263.53	157.6
4126.00	0.45	322.60	4106.09	262.95	-243.32	99.75	0.21	262.97	157.7
4222.00	1.06	337.45	4202.08	261.69	-242.20	99.18	0.66	261.72	157.7
4317.00	0.86	37.93	4297.07	260.47	-240.82	99.29	1.03	260.49	157.5
4412.00	0.59	7.90	4392.06	259.70	-239.78	99.79	0.48	259.71	157.4
4507.00	1.14	0.19	4487.05	258.42	-238.35	99.86	0.59	258.42	157.2
4602.00	1 01	346 16	4582.04	256.72	-236.59	99.66	0.31	256.72	157.1
4667.00	1.10	18.68	4647.03	255.69	-235.44	99.73	0.92	255.69	157.0
4729.00	0.53	71.05	4709.02	255.27	-234.78	100.19	1.42	255.27	156.8
4824.00	0.28	38.14	4804.02	255.19	-234 46	100.75	0.35	255.19	156.7
4920.00	0.71	12.94	4900.01	254.59	-233.69	101.03	0.49	254.60	156.6
	4.40						0.49		
5015.00	1.19	5.48	4995.00	253.25	-232.14	101.25	0.52	253.26	156.4
5110.00	0.82	20.33	5089.99	251.89	-230.52	101.58	0.47	251.91	156.2
5206.00	0.28	132.80	5185.98	251.60	-230.03	101.99	1.00	251.63	156.0
5301.00	0.54	23.07	5280.98	251.51	-229.78	102.34	0.72	251.54	155.9
5396.00	0.34	49.15	5375.98	251.11	-229.18	102.73	0.29	251.15	155.8
							4.20		
5491.00 5586.00	1.12 2.14	153 76 189.33	5470.97 5565.94	251.95 254.38	-229.83	103.35 103.47	1.32 1.46	252.00 254.41	155.7
		100.33	EERE OA	25/20	-232.42	102 17	1 16	75/ //	156.0



## **Scientific Drilling International**

### **Survey Report**

Company: MACK ENERGY

Date: 12/16/2007 Co-ordinate(NE) Reference:

Vertical (TVD) Reference: Section (VS) Reference: Survey Calculation Method:

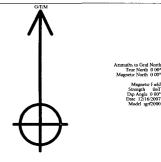
MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
5681.00	1.09	194.79	5660.90	256.59	-235.04	102.96	1.12	256.60	156.34
5745.00	0.67	318.43	5724.89	256.71	-235.35	102.55	2.44	256.72	156.45
5839.00	0.24	221.30	5818.89	256.28	-235.08	102.06	0.79	256.28	156.53
5935.00	1.41	161.10	5914.88	257.54	-236.35	102.31	1.36	257.55	156.59
5998.00	1.01	182.35	5977.87	258 82	-237.64	102.54	0.94	258.82	156.66
6093.00	0.20	294.46	6072.86	259.45	-238.41	102.35	1.16	259.45	156.77
6189.00	0.34	306.99	6168.86	259.08	-238.17	101.97	0.16	259.08	156.82
6284.00	0.45	287.60	6263.86	258.59	-237 89	101.39	0.18	258.59	156.92
6379.00	1.01	331.75	6358.85	257.51	-237.04	100.64	0.79	257.51	157.00
6474.00	0.11	334 85	6453.84	256.59	-236.22	100.20	0.95	256.59	157.01
6570 00	0.15	314.50	6549.84	256.38	-236.04	100.07	0.06	256.38	157.02
6665.00	0.27	304.58	6644.84	256.08	-235.83	99.80	0.13	256.08	157.06
6760.00	0.45	295.56	6739.84	255.61	-235.54	99.28	0.20	255.61	157.14
6855.00	0.46	296.68	6834.84	255 04	-235.21	98.60	0.01	255.04	157.26
6950.00	0 51	281.73	6929.83	254.50	-234.95	97.85	0.14	254.51	157.39
7046.00	1.09	134.41	7025.83	255.10	-235.50	98.08	1.61	255.11	157.39
7140.00	0.38	89.52	7119.82	256.05	-236.13	99.03	0.92	256.05	157.25
7235.00	0.57	122.42	7214.82	256.56	-236.38	99.75	0.34	256.56	157.12
7330.00	0.81	125.40	7309.81	257.52	-237.02	100.69	0.26	257.52	156.98
7367.00	0.87	128 12	7346.81	257.99	-237.35	101.13	0.19	257.99	156.92

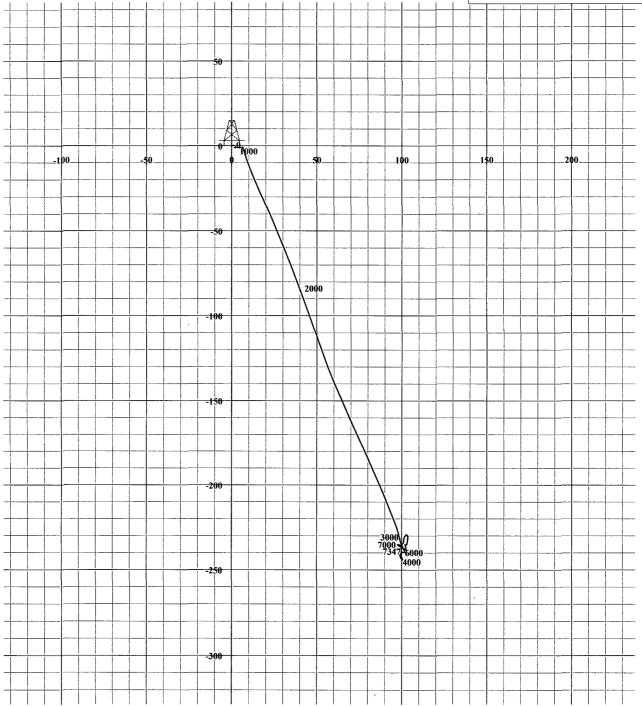


South(-)/North(+) [50ft/in]

Field: Chalk Bluff

Site: Eddy County, NM
Well: State H #2
Wellpath: DH - Job #32D11071006
Survey: 11/05/07-11/14/07





West(-)/East(+) [50ft/in]

### Wilson, Kimberly M, EMNRD

From: Jerry Sherrell [jerrys@mackenergycorp.com]

Sent: Wednesday, March 05, 2008 3:37 PM

To: Wilson, Kimberly M, EMNRD

Subject: FW: Financial Assurance/Rule 40- Mack

Importance: High

From: Altomare, Mikal, EMNRD [mailto:Mikal.Altomare@state.nm.us]

Sent: Tuesday, March 04, 2008 11:03 AM

To: Mull, Donna, EMNRD

Cc: Rebecca Groh; Jerry Sherrell; Phillips, Dorothy, EMNRD

**Subject:** Financial Assurance/Rule 40- Mack

Importance: High

#### Donna -

I have received a pdf version of what appears to be a properly and fully executed single well bond for the state h no. 001, 03-015-00745, which Mack has assured me that they are overnighting to our office. Everything appears to be in order, and I expect that, upon receipt of the original in our office, it will be reviewed and accepted and Mack will no longer be listed as being out of compliance with financial assurance requirements. That being said, and given that Mack has posted all other necessary financial assurances for all other properties, if there are no other violations or issues with approval of pending Mack applications, consider them to be in compliance for purposes of pending permit applications with your office.

Please contact me if you have any questions.

Thanks, Mikal



Assistant General Counsel
Oil Conservation Division
Energy, Minerals & Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505
Tel 505.476.3480 ~ Fax 505.476.3462
mikal.altomare@state.nm.us

CONFIDENTIAL----- This transmission contains confidential information subject to the attorney-client and/or attorney work product privilege. It is intended solely for the use of the intended recipient. Use or dissemination of the information herein contained by any other person is strictly prohibited. If you have received this e-mail in error, please immediately advise the sender.

Confidentiality Notice: This e-mail, including all attachments is for the sole use of the intended recipient (s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure

3/5/2008

or distribution is prohibited unless specifically provided under the New Mexico Inspection of Public Records Act. If you are not the intended recipient, please contact the sender and destroy all copies of this message. -- This email has been scanned by the Sybari - Antigen Email System.

This inbound email has been scanned by the MessageLabs Email Security System.

Submit 3 Copies To Appropriate District  Office  State of New Mex	
District   Energy, Minerals and Natura   1625 N French Dr., Hobbs, NM 88240	WELL API NO.
District II 1301 W Grand Ave , Artesia, NM 8821 0 OIL CONSERVATION I	DIVISION 30-015-35814 5. Indicate Type of Lease
District III 1220 South St. France	IS Dr. STATE X FEE
District IV Santa Fe, NM 8/3	6. State Oil & Gas Lease No.
1220 S. St. Francis Dr., Santa Fe, NM Record Clean UP	B-9391
SUNDRY NOTICES AND REPORTS ON WELL'S (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUCO DIFFERENT RESERVOIR, USE "APPLICATION FOR PERMIT" (FORM C-101) FOR	CHOH
PROPOSALS)  1. Type of Well: Oil Well  Gas Well  Other	State H  8. Well Number 2
2. Name of Operator  Mack Energy Corporation	9. OGRID Number 013837
3 Address of Operator	10. Pool Name or Wildcat
P.O. Box 960 Artesia, NM 88210	Red Lake; Glorieta-Yeso NE
4. Well Location	
Unit Letter H 2063 feet from the North Section 2 Township 18S Ran	line and 441 feet from the East line ge 27E NMPM County Eddy
Section 2 Township 18S Ran  11. Elevation (Show whether DR,	8-
3590' (	GR .
12. Check Appropriate Box to Indicate Na	ture of Notice, Report or Other Data
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK PLUG AND ABANDON	REMEDIALWORK
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐ ☐ PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐	COMMENCE DRILLING OPNS. P AND A CASING/CEMENT JOB
DOWNHOLE COMMINGLE	S. COLINE AT TOO
	OTHER: Workover
13. Describe proposed or completed operations. (Clearly state all pe of starting any proposed work). SEE RULE 1103. For Multiple o≭recompletion.	
2/12/2008 Perforated 3790.5-4025.5', 54 holes.	
2/13/2008 Acidized w/ 2,500 gals 15% NEFE Acid. 2/20/2008 Frac w/ 20,156# White Sand 16/30, 13,828# Siber Prop 16	/20. 26.414 gals 40# gal
2/21/2008 Perforated 3364-3677', 72 holes.	750, 50,414 gais 40# gei.
2/22/2008 Acidized w/ 2,500 gals 15% NEFE Acid.	
2/25/2008 Frac w/ 8,000# LiteProp 125 14/30, 73,600# White Sand 1 2/27/2008 R1H w/ 134jts 2 7/8" J-55 6.5# tubing, SN @ 4243', 2 1/2	
	RECEIVED
	SEP <b>2 0</b> 2012
Spud Date: Rig Release Date	NMOCD ARTESIA
10/31/2007	11/22/2007
I hereby certify that the information above is true slid complete to the bes	t of my knowledge and belief.
Dogwa Warren	Cupia
SIGNATURE JULIA TITLE Producti	
Type or print name Deana Weaver E-mail address: For State Use Only	<u>dweaver@mec.com</u> PHONE: (575)748-1288
APPROVED BY: APPROVED BY: APPROVED BY:	Deplust DATE 9/26/12
MINOTEDERIC II S ASS. HILE IV	CILY A PS(MILL) CATE II COLLECT



### NAVAJO REFINING COMPANY Map ID No. マム Artificial Penetration Review

OPERATOR Mewbourne Oil Co. LEASE Chalk Bluff Fed WELL NUMBER Com 003 DRILLED 11-24-92 PLUGGED NA	STATUS ACTIVE GOS LOCATION Sec. 1 -T18S-R27E MUD FILLED BOREHOLE NA TOP OF INJECTION ZONE 7345' API NO. 30-015- 27163
REMARKS: Calc. Top of Cement	behind 7"@ 9101
	_95/8"@ 2600' w/250 sx
	≥ 7"@ 8968' ω/1200 sx
	Perfs: 9950'-9954' Perfs: 9957'-9972'
7	278" +bg@ 9972'pkr@ 9797'
	41/2" @ 8600'-10,150' W/200 sx
TD 10150'	



NAVAJO REFINING COMPANY, L.L.C. Map ID No. 99 Artificial Penetration Review

OPERATOR MEWBOURNE DIL	
LEASE Chalk Bluff Federal	_
WELL NUMBER 3	
DRILLED 1/6/93	<u>-</u>
PLUGGED NA	~

STATUS ACTIVE

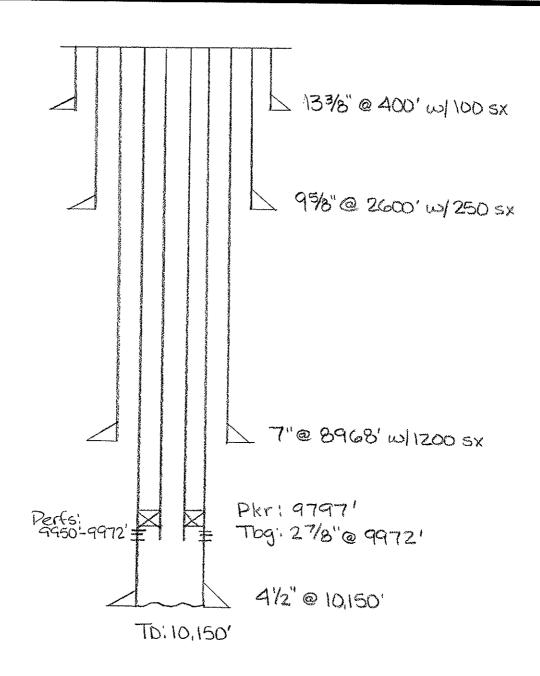
LOCATION Sec. 1 -T | 8 - R 27 E

MUD FILLED BOREHOLE NA

TOP INJECTION ZONE -3702'

API NO. 30-015- 27163

### **REMARKS:**



### **MAP ID NO. 99**

### MEWBOURNE OIL CO. CHALK BLUFF FEDERAL COM NO. 003

API NO. 30-015-27163

APD ATTATCHMENT

Mewbourne Oil Company Chalk Bluff Federal Comm. #3 NM-016788 1980' FSL & 990' FEL Sec. 1-T18S-R27E Eddy County, NM.

- 1.) Casing Design and Safety Factors (See schedule 1 for used casing design program.)
- 2.) Cement Program for Casing Strings.

Surface Casing:

250 sacks of Class "C" containing 2% CaCL2 + 1/4#/sack of cellophane flakes followed by 200 sacks of Class "C" containing 3% CaCL2.

### Intermediate Casing:

700 sacks of Class "C" containing 6% gel + 2% CaCL2 + 1/2#/sack of cellophane flakes + 5#/sack of Gilsonite followed by 200 sacks of CLass "C" containing 3% CaCL2

### Production Casing:

A cement diverter tool (D. V. Tool) will be run at a depth of approximately 7500' from surface. 1st Stage:

850 sacks of Class "H" containing 5#/sack KCL + .7% fluid loss additive + 5#/sack compressive strength extender.

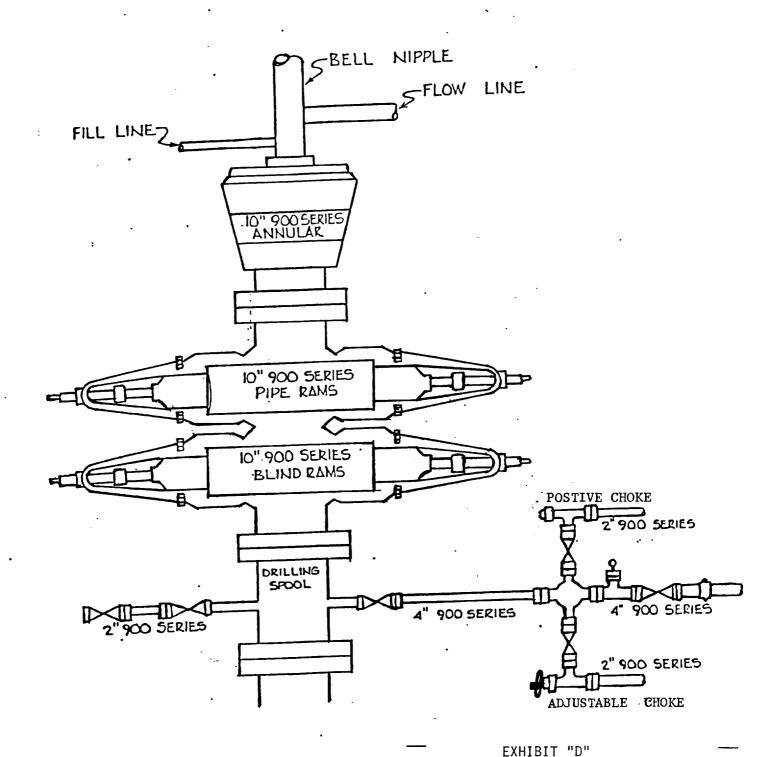
2nd Stage:

900 sacks of Class "C" Lite containing 1/2#/sack cellophane flakes + 5#/sack Gilsonite + .4% fluid loss extender followed by 100 sacks of Class "H" containing .4% fluid loss additive + 5#/sack compressive strength extender.

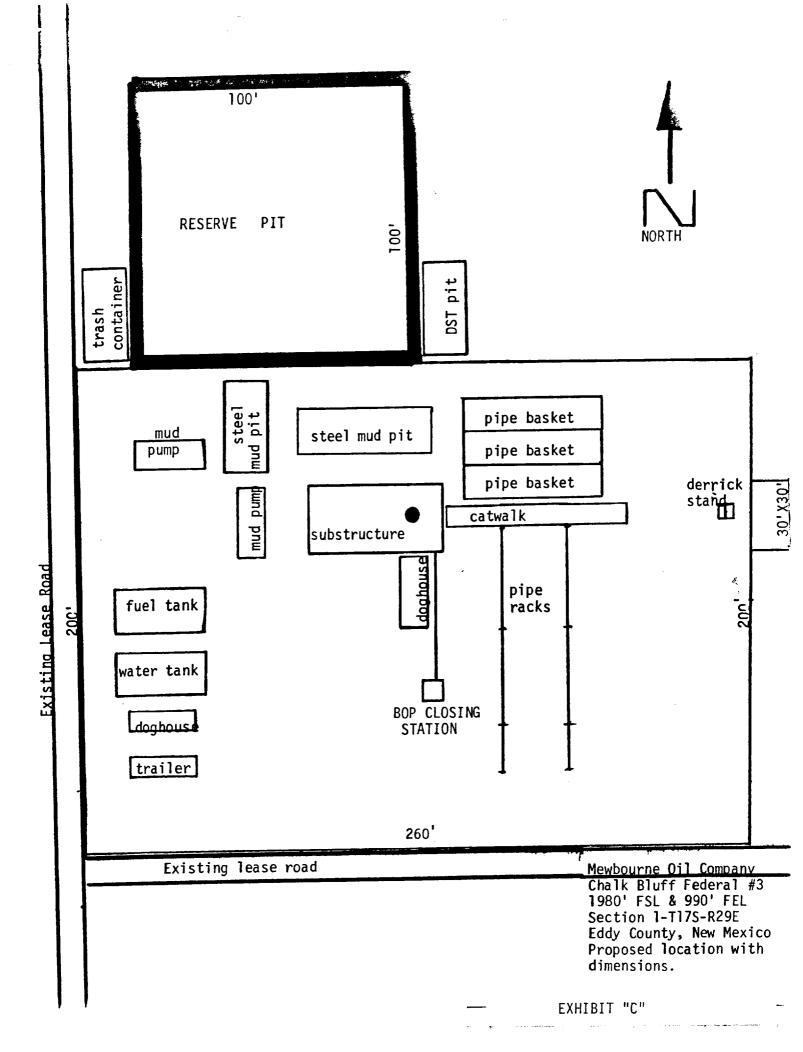
- 3.) Drilling time will require approximately 35 40 days and drilling operations should begin approximately November 1, 1992.
- 4.) The possibility of encountering H2S gas in this area remote. Mewbourne Oil Company has drilled offset wells to this proposed location and none of these wells have encountered any H2S gas in the Pennsylvanian. In the event H2S is encountered, the necessary H2S safety equipment will be installed on location to provide for a safe working environment.
- 5.) Anticipated formation temperature and pressure in the Morrow zone will be approximately 155 degrees fahrenheit and 3,000# psi.

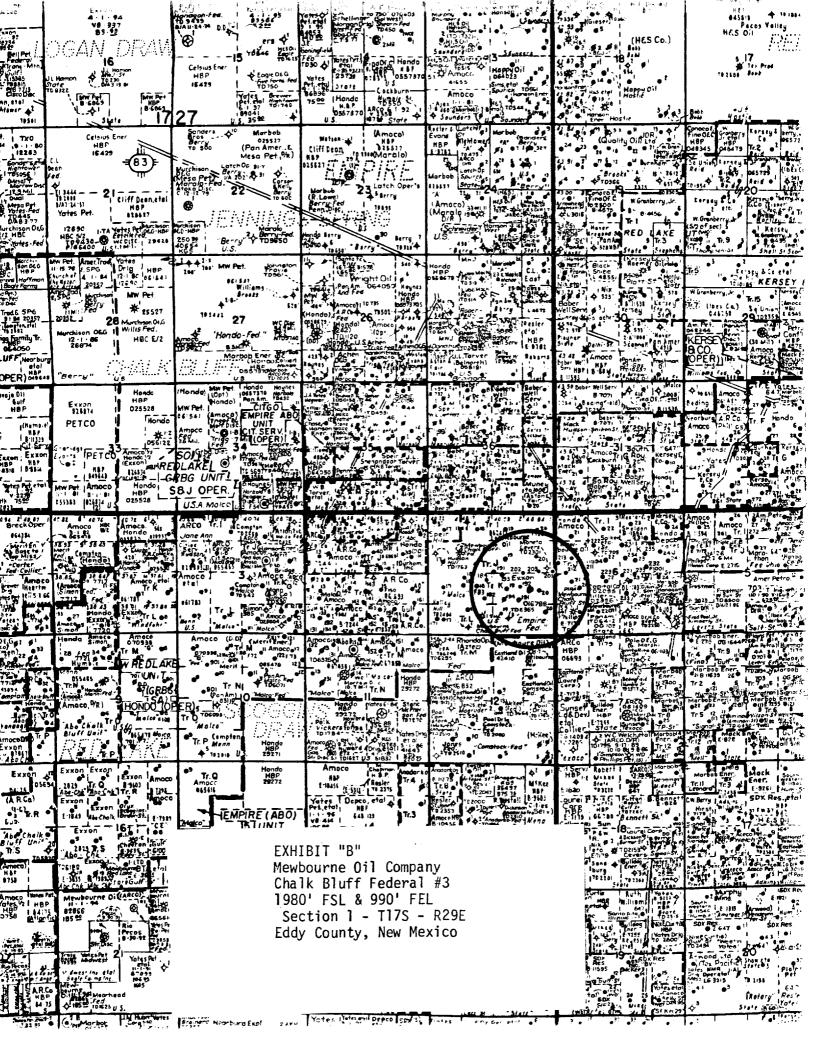
- 6.) This location is a non-standard location. A hearing is scheduled for October 15, 1992 in Santa Fe, New Mexico before the New Mexico Oil Conservation Division for an unorthodox location exception.
- 7.) The pressure rating on the BOP STACK (see exhibit "D" of the APD) is 3,000# psi. The correct pressure rating of ANSI 900 series is noted in the APD. The API standard for pressure ratings for flanged equipment is in ANSI series. ANSI 600 series is 2,000# psi working pressure test, ANSI 900 series is 3,000# psi working pressure, ANSI 1500 series is 5,000# psi work-pressure.

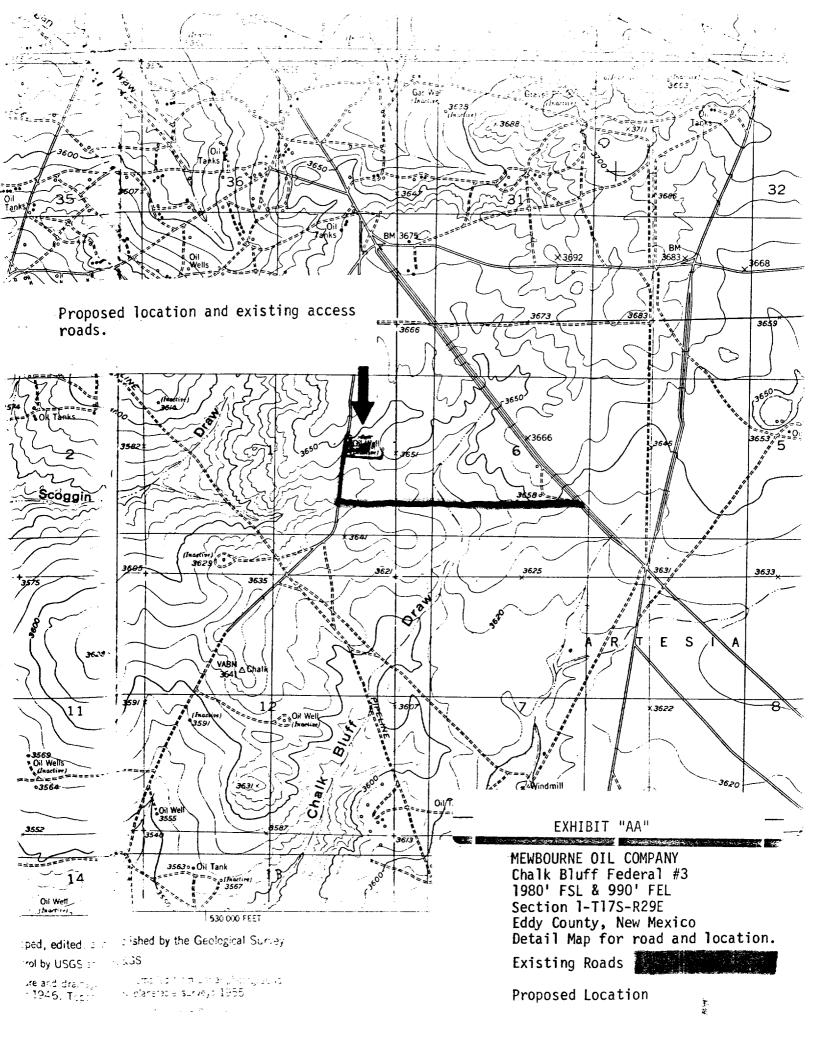
	ASE NAME:			DERAL #3	TYPE OF CSG		PRODUCTION
	GALS:	SEC 1-1			DEPTH OF CSC	):	10,300
6.	ising Minimum Perfori	MANCE P	ROPERTIE	\$			
	CSG TYPE			K-FACTOR	COLLAPSE	BURST	TENSION
1	5 1/2" 20# N-80 LT&C	:		991,000	8830	9190	428000
2	5 1/2" 17# N-80 LT&C	;		844,000	6380	7740	348000
3	5 1/2" 20# N-80 LT&C	:		991,000	8830	9190	428000
4							
5							
	GRADE OF CASING:	85	% OF NE	W			
	CSG TYPE				COLLAPSE	BURST	TENSION
1	5 1/2" 20# N-80 LT&C	:			7506	7812	363800
2	5 1/2" 17# N-80 LT&C	2			5423	6579	295800
3	5 1/2" 20# N-80 LT&C	:			7506	7812	363800
4	0				0	0	0
5	0				0	0	0
SE	TTING DEPTH (WT. OF	CSG IN AI	R)	CASING	INTERVAL	INTERVAL	CUMMULATIVE
	FROM	TO		WT. (LB/FT)	LGTH (FT.)	WT. (LBS)	WT. (LBS)
1	0	1,000	_	20	1000	20,000	181,100
2	1,000	9,300		17	8300	141,100	161,100
3	9,300	10,300		20	1000	20,000	20,000
4	0				0	0	0
5	0				0	0	0
W	ELLBORE CONDITIONS						
M	UD WEIGHT:	9.6	PPG				
B	DUYANCY FACTOR	0.853	(AIR =	1)			
DI	SPLACEMENT FLUID WT:	8.5	PPG	ANNULAR	COLLAPSE	HOLE	
				HYDROSTATIC	W/AXIAL	HYDROSTATIC	
	DEPTH	_		PRESSURE	LOADING	PRESSURE	TENSION
	0			0		0	154,478
1	1000			499	5982	442	137,418
2	9300			4643	5290	4111	17,060
3	10300			5142	7506	4553	0
4	0			0	ERR	0	0
5	0			0	ERR	0	0
FI	NIAL CASING DESIGN				SAFTEY FACTO		
					COLLAPSE	BURST	TENSION
		FROM	TO	LENGTH	>1.125	>1.00	>2.00
0		0	0	0	ERR	ERR	ERR
0		0	0	0	ERR	ERR	ERR
-	1/2" 20# N-80 LT&C	10,300	9,300	1000	1.460	1.716	21.325
5	1/2" 17# N-80 LT&C	9,300	1,000	8300	1.139	1.600	2.153
5	1/2" 20# N-80 LT&C	1,000	0	1000	11.983	17.673	2.355

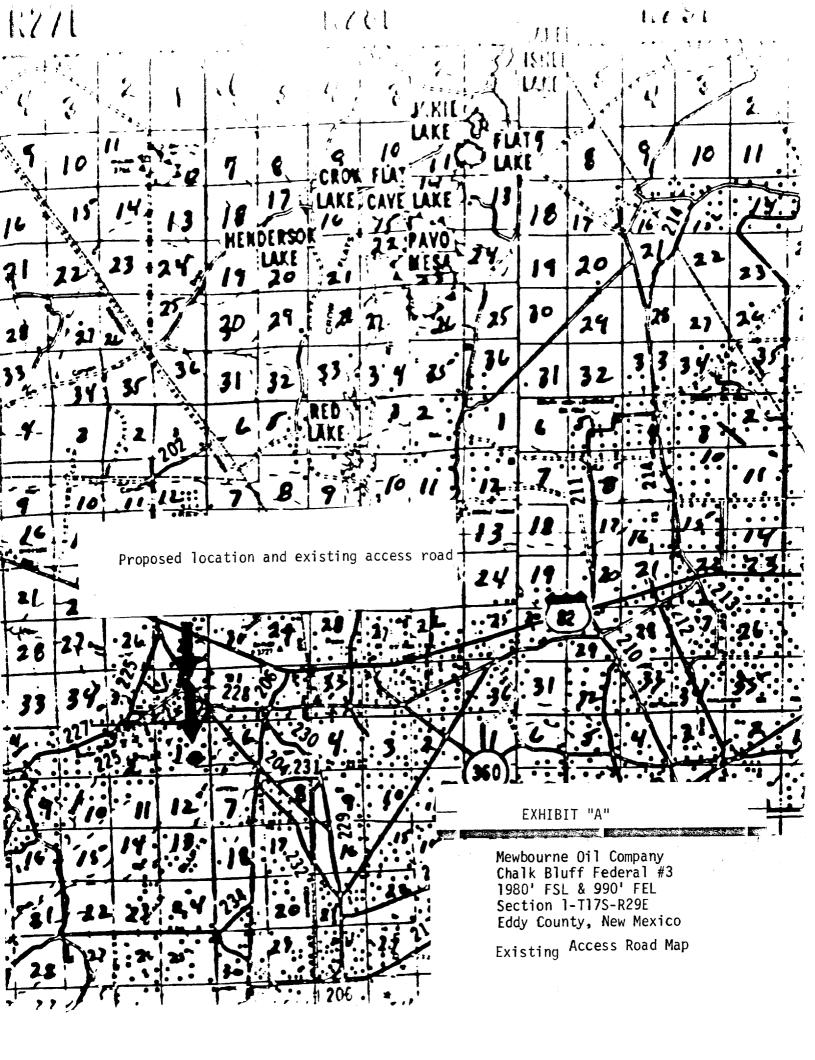


Mewbourne Oil Company Chalk Bluff Federal #3 1980' FSL & 990' FEL Section 1-T17S-R29E Eddy County, New Mexico









Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

# State of New Mexico cnergy, Minerals and Natural Resources Department

Form C-102 Revised 1-1-89

### **OIL CONSERVATION DIVISION**

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT II P.O. Drawer DD, Artesia, NM 88210

DISTRICT I P.O. Box 1980, Hobbs, NM 88240

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

# WELL LOCATION AND ACREAGE DEDICATION PLAT All Distances must be from the outer boundaries of the section

The smile of					Lease	<del></del>	<del></del>		Well No.	
Operator					İ				"	
MEWBOURNE					CHALK	BLUFF	FEDERAL		<u>13</u>	
Juit Letter	Section	4	Township		Range			County		
I		1	18 8	SOUTH	27	EAST	NMP	M EI	DY	
Actual Footage Loca	uion of									
1980	feet fi	om the SO	UTH	line and	990	)	feet from	m the EAST	line	
Ground level Elev.	1		g Formation		Pool				Dedicated Acres	age:
3628_	1				Nonth T	llinois	Camp Morn	· ·	320	Acres
	the so	Morr	UW	rell by colored per	cil or bachum r	rarios on the rd	Latine 110 [1]	UW	<u> </u>	- AMAG
i. Culibe	, use at		**	vy wante par		~ ~ P				
2. If more	than o	ae lease is ded	icated to the wel	l, outline each and	identify the ow	nership thereo	f (both as to wor	king interest and	royalty).	
		~								
				is dedicated to the	well, have the	interest of all	owners peen con:	solidated by com	nunitization,	
	•	rce-pooling, etc				Co-	nmunition	tion		
XX	Yes	list the come-	No If a	mswer is "yes" tyj ptions which have	pe or consolicati		nmunitiza: Usa myersa sida			<del></del>
this form			a and mark descri	house amen miles						
No allows	able wi	l be assigned to	o the well until a	il interests have b	een consolidated	(by communi	itization, unitizati	on, forced-poolin	g, or otherwise)	
				erest, has been ap			•	•	= · · · · · · · · · · · · · · · · · · ·	
						_	· · · · · · · · · · · · · · · · · · ·	ODED 4	OB Obnatia	CATTON
						1			OR CERTIFI	
		i		1		i		I hereby	certify that the	he information
		i				i i		contained herei best of my know		complete to the
		ļ.		l l		!	ļ	l oesi oj my bion	auge and being.	$\overline{}$
		J				ļ		Signature 7	A/	
		ı					ŀ	772.1	1/19	0
•		1 .		İ		1	Ī	me	y pre	ncl
		i		1		i ·	1	Printed Name		
				+		<b></b>		Bill	ierce	
		ļ				] 		Position		
		į				!	:	Drilling	<u> Superint</u>	<u>tendent</u>
		ı				1		Company		
		1				<b>!</b>		Mewbouri	ne Oil Com	npany
		İ				1		Date		<u> </u>
		i				i		August 3	1 1002	
		1		l	•	i				
		1						SURVE	OR CERTIF	ICATION
	4.0									
		ļ		•		Į.	0,4		y that the well	
									ras plotted from	
		i		1		1	990'		n made by me ad that the san	
		i				1	90	correct to the	best of my	browledge and
		ì				i 1	1	belief.		•
Ì		ļ				!	1			
1		!		I		!	1	Date Surveyed		
<b></b>				+		<u></u>	<u></u> }	8/26/9		
1		1			•	1 6	1	Signature & S	Z METERS	
		İ	• •			980		Professional	4	<b>.</b>
		i				į –				<b>1</b> 3
1		j		1		i	I		IRDCO	<b>A</b>
		1					l	13/	ILICOCHET .	<b>a</b> 3)
		ļ		1				ach	19N/8 2	
1		l		ı				Certificate No.	CA45 / 5	37
Esk .		1	<u> </u>					- XX.3	540	\$
								1 7		<u>,                                      </u>
0 330 660	290	1320 1650	1980 2310	2540 20	00 1500	1000	500 0	, s. s.	للمستعدل شاريون	

### 12. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drilling site and necessary access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by MEWBOURNE OIL COMPANY and its' contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

September 9, 1992

Kelly Ryan

District Superintendent MEWBOURNE OIL COMPANY

C. The estimated depths at which anticipated water, oil or natural gas can be expected are:

Water: Possible surface water be-

tween 100' - 300'.

Oil: Penrose @ 1520'
Gas: Wolfcamp @ 6900'

- D. Proposed Casing Program: See Form 3160-3
- E. Pressure Control Equipment: See Form 3160-3 and Exhibit "D".
- F. Mud Program: See Form 3160-3.
- G. Auxiliary Equipment: Mud-gas seperator, PVT system, and Hydraulic choke from 6,000' to T.D.
- H. Testing and Coring Program: Possibility of 4
  DST's in the following zones:
  Wolfcamp, Cisco,
  Strawn, Morrow. No
  cores are planned
  at this time.
- I. Logging: Gamma Ray Spectral Density Dual Spaced Neutron Log from T.D. to surface. Gamma Ray - Dual LaterLog - Micro Guard Log from T. D. to Intermediate casing.
- J. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to accomodate the increased pressures.
- K. Anticipated Starting Date: As soon as possible after BLM approval.

#### 11. OPERATOR'S REPRESENTATIVES:

The field representatives responsible for assuring compliance with the approved surface use and operations plan are as follows:

Kelly Ryan(505) 393-5905Box 5270Bill Pierce24. hour asweringHobbs, NMGreg Milnerservice.88241

#### 7. ANCILLARY FACILITIES:

A. None required.

### 8. WELLSITE LAYOUT:

- A. Exhibit "C" shows the relative location and dimensions of the well pad, mud pits, reserve pits, trash container and location of major rig components.
- B. A 400' X 400' area has been flagged surroundthe staked well.

### 9. PLANS AND RESTORATION OF THE SURFACE:

A. After completion of drilling and/or completion operations, all equipment not needed for producing operations will be removed. Pits will be filled in after all fluids have evaporated and the location cleaned of all trash and junk to leave the wellsite in an asthetically pleasing condition as reasonably possible. All production facilities left on location will be painted to conform with BLM painting regulations within 120 days of completion.

#### 10. OTHER INFORMATION:

- A. The geologic surface formation is hard clay interspersed with sand and chert outcroppings. Vegatative covering is generally sparse except in low-lying areas where grass is prevelant. Other vegatative covering consists mostly of greasewood and bear grass.
- B. The estimated tops of geologic markers are as follows:

Queen	1260'	Cisco	7740'
✓San Andres	2100'	Canyon	8350'
Glorieta	3720'	Strawn	8900'
Tubb	4930'	Atoka	9500'
Abo	5900'	Morrow	9600'
✓ Wolfcamp	6900'	Miss.	10,100'

## 4. LOCATION AND TYPE OF WATER SUPPLY:

A. Water will be purchased from trucking companies servicing this area and will be trucked to the wellsite over existing and/or proposed roads shown on Exhibits "A" and "AA".

## 5. LOCATION OF CONSTRUCTION MATERIALS:

A. Caliche for construction of the location and any needed road repairs hopefully will come from the location itself. If this is not possible, caliche will be taken from a BLM pit located in the NE4/NW4 of Sec. 12-T18S-R27E which is BLM pit #18271203. This pit also extends into the SE4/SW4 of Sec. 1-T18S-R27E which is BLM pit #18270114. An alternative pit which may be used in the event BLM pit #18271203 contains unsuitable material is a BLM pit located in the SW4/NE4 of Sec. 1-T18S-R27E which is BLM pit #18270107.

## 6. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.
- C. Water used and produced during stimulation, production testing, squeezing opeations etc. will be disposed of in the drilling pits. Oil produced during tests will be stored on site in steel test tanks until sold.
- D. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- E. All trash, junk and other waste material will be contained in an appropriate container to prevent scattering and will be removed and deposited in an approved sanitary landfill.
- F. All trash and debris will be buried or removed from the wellsite within 90 days after drilling and/or completion operations have ceased.

## MULTI-POINT SURFACE USE AND OPERATING PLAN MEWBOURNE OIL COMPANY

CHALK BLUFF FEDERAL WELL NO. 3
1980' FSL & 990' FEL OF SEC. 1-T18S-R30E
EDDY COUNTY, NEW MEXICO
NEW MEXICO LEASE NO. NM-016788

This plan is submitted with the Application for Permit to Drill (APD) the above captioned well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities, operations plan and the magnitude of necessary surface disturbance involved, so that a complete, comprehensive appraisal can be made as to the environmental effects associated with this operation. The surface is owned by the Federal Government and is managed by the Bureau of Land Management.

### 1. EXISTING ROADS:

- A. From the junction of U. S. 82 and U. S. 285
  Highways in Artesia, proceed east on U. S. 82
  12 miles. Turn right (south) on Eddy County Road
  #206 (Illinois Camp Road) and proceed south for
  1.75 miles. Turn right (northwest) on Eddy
  County Road #204 and proceed .75 miles. Turn
  left (west) on caliche lease road and proceed 1
  mile. Turn right (north) 100 yards on caliche
  lease road and location will be on the right hand
  side of the lease road. (Exhibit "A" & "AA")
- B. Culverts: None required
- C. Cuts and Fills: A two foot cut will be required to construct the location.
- D. Turn-Outs: None required.
- E. Gates or Cattleguards: None required.

### 2. LOCATION OF EXISTING WELLS

A. Existing wells in a 1 mile radius are shown on Exhibit "B".

### 3. LOCATION OF PROPOSED ACTIVITIES:

A. If the well is productive, all production facilities will be constructed on the existing pad. Form 3160-3 (November 1983) (formerly 9-331C)

SUBMIT IN TRIPLICATE* ions on le) (Other ins' revers

Form approved. Budget Bureau No. 1004. Expires August 31

July Divilo
DEDMOTMENT OF THE INTEDIOD
DEPARTMENT OF STHE INTERIOR
BUREAU OF LAND MANAGEMENT
DOVE AD OF EARD MANAGEMENT

NM-016788 1557371

APPLICATION	N FOR PERMIT	TO DRILL, I	DEEPEI	N, OR PLUG B	ACK	6. IF INDIAN, ALLOTTE	B OR TRIBE NAME
1a. TYPE OF WORK DRI	LL XXX	DEEPEN		PLUG BAC	CK 🗆	7. UNIT AGREEMENT N	AMB
b. TYPE OF WELL	18 ( <del>)</del>		SING		re [_]	S. FARM OR LEASE NA	
WELL W	ELL X OTHER		ZONI	· · · · · · · · · · · · · · · · · · ·		Chalk Bluff I	
	Company			RECEIVE	Ď	9. WELL NO.	Cu. Commi.
Mewbourne Oi	Company			007 13 19	222	3	
Box 5270	Hobbs, New M	exico 8824	1			10. FIELD AND POOL, C	R WILDCAT
LOCATION OF WELL (R. At surface	eport location clearly and	i in accordance wi	th any Sta	te requiremots.C. D.	, /	North Illinois	s Camp Morr
1980' FSL at At proposed prod. son		ut	工	ARTESIA DE	KCE	11. SEC., T., R., M., OR AND SURVEY OR AN 189 27	E
Same  4 DISTANCE IN MILES	AND DIRECTION FROM NEA	REST TOWN OR POS	T OFFICE®	<del></del>		1-T1-7S-R29	<del></del>
	utheast of Arte					Eddy	NM
5. DISTANCE FROM PROPO	SED*	314, 11011 110		OF ACRES IN LEASE		F ACRES ASSIGNED	1 14.1
LOCATION TO NEAREST PROPERTY OR LEASE L (Also to nearest drig S. DISTANCE FROM PROP	INE, FT. . unit line, if any)	990'	19 PPOE	320		320 RY OR CABLE TOOLS	
TO NEAREST WELL, DO OR APPLIED FOR, ON THE	RILLING, COMPLETED,	20401		,300'	l _		
1. ELEVATIONS (Show who		2040'	1 10	, 500	1 1	tary 22. APPROX. DATE WO	RE WILL START*
3628						Upon BLM appi	_
3.	un.	PROPOSED CASI	NG AND	EMENTING PROGRAM	vi		
	· · · · · · · · · · · · · · · · · · ·	•		SETTING DEPTH	" [%	O Water Sasin	
17 1/2"	13 3/8"	WEIGHT PER P	-	400' +	450 9	ks. Class C c	
17 1/2" 12 1/4"	9 5/8"	36#		2,600' +	f	s. Tie back i	
8 3/4"	5 1/2"	17 & 20#		10,300' +		s. of Class "	
400' - 2600' 2,600' - 8500'	needed. ' Cut brine wi	and lime. th lime for th Drispac, 10 CC or 1	LCM a pH cor salt	is needed. itrol. Wt. 9. gel, lime, so	2 - 9.6 da ash,	5# ppg, WL − N	Wt. 9.2 -
	and Hydrill or		ırface	casing and on	9 5/8'	'intermediate	casing.
one. If proposal is to reventer program, if an	PROPOSED PROGRAM: If drill or deepen direction	proposal is to deep ally, give pertinen	pen or plu t data on	g back, give data on pr subsurface locations an	esent production description	uctive sone and propose I and true vertical depth	d new productive s. Give blowout
4. SIGNED	Lyan	Ti'	re Disi	trict Superint	endent	DATE _09/09	/1992
(This space for Pede	ral or State office use)						
PERMIT NO.			A:	PPROVAL DATE		a form	CAN DE LA
4				e good t		DATE	7-67 440
CONDITIONS OF APPROV	AL, IF ANY	<b>T</b> I7	rle				101.711.
APPROVAL S						1 .	Sr. "(1//)
	QUIREMENTS AND					1	cp zo
SPECIAL STI				n Reverse Side		C O/G	100-
itle 18 H.S.C. SECTION Inited States any false	1001, makes it a crin e, fictitious or fraudule	ne for any person ent statements or	knowing represen	ly and willfully to ma tations as to any mat	ake to any tter within	department of agence its jurisdiction.	yoof the N.M.

#### INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operators, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the mumber of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well. If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

ITEM 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

## AOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR Part 3160.

PRINCIPAL PURPOSE: The information is to be used to process and evaluate your

application for permit to drill, deepen, or plug back an oil or gas well.

ROUTINE USES: (1) The analysis of the applicant's proposal to discover and extract the Federal or Indian resources encountered. (2) The evaluation of the effects of proposed operation on surface and subsurface water and other environmental impacts. (4)(5) Information from the record and/or the record will be transferred to appropriate

Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions, as well as routine regulatory responsibility.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if the lessee elects to initiate drilling opera-

tion on an oil and gas lease.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq) requires us to inform you that:

This information is being collected to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases.

This information will be used to analyze and approve applications. Response to this request is mandatory only if the lessee elects to initiate drilling opera-

tions on an oil and gas lease.

JAN 0 4 1993

**UNITED STATES** 

Form 3160-5

FORM APPROVED Budget Bureau No. 1004-0135

June 1990)	DEPARTMENT OF T		Expires: March 31, 1993
	BUREAU OF LAND N	MANAGEMENT	5. Lease Designation and Serial No.
	SUNDRY NOTICES AND R	EPORTS ON WELLS	NM - 0557377  6. If Indian, Allottee or Tribe Name
		deepen or reentry to a different reservoir.	
U	se "APPLICATION FOR PERM	iii — for such proposals	7. If Unit or CA, Agreement Designation
	SUBMIT IN TR	IPLICATE	7. If the two CA, Agreement Designation
1. Type of Well	_		1
Oil Well Well  2. Name of Operator	Other		8. Well Name and No. Chalk Bluff Federal
Mewbourne (	Dil Company		9. API Well No. Comm. #3
3. Address and Telephone N			3001527163
	270 Hobbs, New Mexico e, Sec., T., R., M., or Survey Description)	88241 (505) 393-5905	10. Field and Pool, or Exploratory Area North Illinois Camp
4. Location of Well (Footag	e, sec., 1., k., M., of survey Description)		11. County or Parish, State Morrow
1980' FSL 8			1.5.
Sec. 1-T189			Eddy Co., N.M.
12. CHECK	APPROPRIATE BOX(s) TO I	NDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF	SUBMISSION	TYPE OF ACTION	
Notice of	f Intent	Abandonment	Change of Plans
_		Recompletion	New Construction
Subseque	ent Report	☐ Plugging Back☐ Casing Repair	Non-Routine Fracturing Water Shut-Off
Final Ab	andonment Notice	Altering Casing	Conversion to Injection
		Other Spud well & cemented	Dispose Water (Note: Report results of multiple completion on Well
13 Describe Proposed or Car	nnlated Operations (Clearly state all pertinent	13-3/8" surf. csg.  details, and give pertinent dates, including estimated date of starting	Completion or Recompletion Report and Log form.)
		or all markers and zones pertinent to this work.)*	g miy proposod work. It was to discoursely allowed
Spudded we	11 @ 4:00 p.m. MST 11/2	24/92. Drilled 17-1/2" surface	hole to 400' KB.
Ran 10 joi:	nts of 13-3/8", 54.50#,	New LS, ST&C casing and set @	400' KB. Western
		ment containing 12% Thixad + 3%	
		6% Gel + 3% CaCl2 + 1/4 pps cel f Class "C" neet containing 3% C	
		ob complete @ 5:30 a.m. 11/25/92	
		A SE SE SE SE SE SE SE SE SE SE SE SE SE	and the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second o
_		The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	
		DEP.	469 <b>2</b> 1
		0	
			% ~
		No. 14 to	
		To also the service	<del>, / </del>
14. I hereby certify that the	foregoing is true and correct	Title Drilling Supt.	Date 12/02/92
Signed(This space for Federal of	or State office use) / / //	nuc or ready	Date - 7 v-1 v-2
Approved by	red A Alam	Title	Date
Conditions of approval, i	f any: 1992		
	· KANTE		

Title 18 U.S.C. Section 1001, 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.

## GENERAL INSTRUCTIONS

structions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special in-

#### SPECIFIC INSTRUCTIONS

zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mund or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and the depth to top of any left in the hole; method of closing to pulled and date well site conditioned for final inspection looking to approval of the abandonment.

Item 4—If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

liem 13—Proposals to abandon a well and subsequent reports of abandon-ment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive

### NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et. seq., 351 et. seq., 25 U.S.C. et. seq.; 43 CFR 3160.

PRINCIPAL PURPOSE — The information is to be used to evaluate, when appropriate, approve applications, and report completion of secondary well operations, on a Federal or Indian lease.

(1) Evaluate the equipment and procedures used during the proposed or completed subsequent

- well operations
- (2) Request and grant approval to perform those actions covered by 43 CFR 3162.3-2(2).

  (3) Analyze future applications to drill or modify operations in light of data obtained and methods
- (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations

FFFECT OF NOT PROVIDING INFORMATION — Filing of this notice and report and disclosure of the information is mandatory once an oil or gas well is drilled.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501, et. seq.) requires us to inform you that:

This information is being collected in order to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

This information will be used to report subsequent operations once work is completed and when requested, to obtain approval for subsequent operations not previously authorized.

Response to this request is mandatory for the specific types of activities specified in 43 CFR Part 3160.

#### BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Alternate) Bureau of Land Management, (Alternate) Bureau of Claiset, (WO-771), 18 and C Streets, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0135), Washington, D.C. 20503.

eu.s. GPO: 1990-773-816/26019

CISF

RECEIVED

Form 3160-5 (June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

JAN 04 1993

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No.

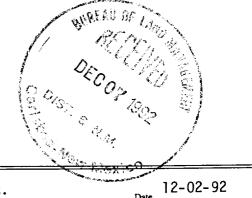
O. C. D. NM-0557371

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  Use "APPLICATION FOR PERMIT—" for such proposals	6. If Indian, Allottee or Tribe Name
SUBMIT IN TRIPLICATE	7. If Unit or CA, Agreement Designation
1. Type of Well Oil Well Well Other 2. Name of Operator	8. Well Name and No. Chalk Bluff Federal
Mewbourne Oil Company  3. Address and Telephone No.	9. API Well No. COMM. #3 3001527163
P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-5905	10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec. T. R., M., or Survey Description) 1980' FSL & 1980' FEL Sec. 1-T18S-R27E	N. Illinois Camp Morro
	Eddy Co., New Mexico

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12. TYPE OF ACTION TYPE OF SUBMISSION Change of Plans Abandonment Notice of Intent **New Construction** Recompletion Non-Routine Fracturing Plugging Back Subsequent Report Water Shut-Off Casing Repair Conversion to Injection Final Abandonment Notice Altering Casing 9-5/8" Inter. _{Other} Cement Dispose Water Casing (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Drilled 12-1/4" Intermediate hole to 2600' KB. Ran 59 joints of 9-5/8", 36#, New LS, ST&C casing and set @ 2600' KB. Western cemented with 590 sacks of Class "C" lite containing 6% gel + 10 pps NaCl + 1/4 pps celloseal followed by 250 sacks of Class "C" containing 2% CaCl2. Circulated 50 sacks of cement to the pit. Job complete @ 11: 50 p.m. 11/29/92.



			Man war	
14. I hereby certify that the foregoing is true and correct Signed	Title	Drilling Supt.	Date	12-02-92
(This space for Federal of State office use)  Approved by Conditions of approval, if any:	Title _		Date	-

Title 18 U.S.C. Section 1001, 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.

## **GENERAL INSTRUCTIONS**

structions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special in-

#### SPECIFIC INSTRUCTIONS

zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and the depth to top of any left in the hole; method of closing to approval of the abandonment.

Item 4—If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 13—Proposals to abandon a well and subsequent reports of abandon-ment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive

## NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et. seq., 351 et. seq., 25 U.S.C. et. seq.; 43 CFR 3160.

PRINCIPAL PURPOSE — The information is to be used to evaluate, when appropriate, approve applications, and report completion of secondary well operations, on a Federal or Indian lease.

- (1) Evaluate the equipment and procedures used during the proposed or completed subsequent ROUTINE USES:
- (1) Evaluate the equipment and procedures used during the proposed of compreted subsequent
- (2) Request and grant approval to perform those actions covered by 43 CFR 3162.3-2(2).

  (3) Analyze future applications to drill or modify operations in light of data obtained and methods
- used.
- (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

of the information is mandatory once an oil or gas well is drilled.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501, et. seq.) requires us to inform you that: This information is being collected in order to evaluate proposed and/or completed subsequent well

operations on Federal or Indian oil and gas leases.

This information will be used to report subsequent operations once work is completed and when requested, to obtain approval for subsequent operations not previously authorized.

Response to this request is mandatory for the specific types of activities specified in 43 CFR Part 3160.

#### **BURDEN HOURS STEMENT**

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 18 and C Streets, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0135), Washington, D.C. 20503.

+0°2° CbO+ 1880-113-816\56018

4SF

Form 3160-5 (June 1990)

## UNITED STATES . DEFARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED

Budget Bureau No. 1004-0135

Expires: March 31, 1993

Expires: March 31, 1993

5. Lease Designation and Serial No.

NM-0557371 SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allottee or Tribe Name Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE I. Type of Well Oil Well 8. Well Name and No. Gas Well U Other Chalk Bluff Fed. Comm. 3 2. Name of Operator 9. API Well No. Mewbourne Oil Company
3. Address and Telephone No. 30-015-27163 10. Field and Pool, or Exploratory Area P.O. Box 5270 Hobbs, New Mexico 88241

4. Location of Well (Footage, Sec., T., R., M., or Survey Description) N. Illinois Camp Morrow 11. County or Parish, State 1980' FSL & 1986' FEL Sec. 1-T18S-R27E Eddy CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12 TYPE OF ACTION TYPE OF SUBMISSION Change of Plans Abandonment Notice of Intent **New Construction** Recompletion Non-Routine Fracturing Plugging Back Subsequent Report Water Shut-Off Casing Repair Conversion to Injection Altering Casing Final Abandonment Notice Other Cement 7" Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) 13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)* Lost complete returns \$\overline{0}\$ 7683' \to Dry drilled 8-3/4" hole to 8968'. Ran 226 Jts. of 7", 26# & 29#, N-80 & S-95 grade used API casing and set @ 8968'. Multiple stage cementer @ 6997' and external casing packer @ 7026'. Western cemented the first stage w/350 sks. of Class "H" containing 8 pps CSE  $\pm$  .75% CF-14  $\pm$  5 pps Gilsonite  $\pm$  .35% Thrifty Lite. Set ECP and opened DV tool. Cemented 2nd stage w/750 sks. of Class "C" containing 1 pps celloseal + 5 pps gilsonite + 3% salt followed by 100 sks. of Class "H" Neet. Plug down to 6997' @ 2:45 a.m. 12/26/92 D FOR ASSORD OR G. SGD.) DAVID R GLASS Tide Drilling Superintendent Title Date Approved by _______ Conditions of approval, if any

Form	3160-5
(June	1990)

## UNITED STATES . DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPRO	OVET
Budget Bureau No.	1004-0135
Expires: March	31, 1973

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

Lease Designation and Serial No.

BUREAU OF I	AND MANAGEMENT	J. Lease Designation and Serial 11
SUNDRY NOTICES  Do not use this form for proposals to dri  Use "APPLICATION FOR		
SUBMIT	IN TRIPLICATE	7. If Unit or CA, Agreement Designation
I. Type of Well  Oil  Well  Gas  Well  Other  2. Name of Operator	F 19 (F & 19 <b>93</b>	8. Well Name and No.  Chalk Bluff Fed. Comm. #
Mewbourne Oil Company	3. C.D.	9. API Well No. 30-015-27163
3. Address and Telephone No.	ico 88241	10. Field and Pool, or Exploratory Area
P.O. Box 5270 Hobbs, New Mex 4. Location of Well (Footage, Sec., T., R., M., or Survey Do	N. Illinois Camp Morrow	
9 <i>GO ¹</i> 1980' FSL & 1 <del>960'</del> FEL Sec. 1-T18S-R27E	11. County or Parish, State  Eddy	
2. CHECK APPROPRIATE BOX(	s) TO INDICATE NATURE OF NOTICE, REPO	ORT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	V
Notice of Intent	Abandonment	Change of Plans  New Construction
Subsequent Report	Recompletion Plugging Back Casing Repair	Non-Routine Fracturing Water Shut-Off
Final Abandonment Notice	Altering Casing  Other Pure 4-1/2" Liner	Conversion to Injection

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Drilled well to a total depth of 10,150' w/6" hole, ran 45 jts. of 4-1/2", 11.6#, N-80, used API casing and hung liner from 8599' to 10,150'. Western cemented w/200 sks. of Class "H" containing 5 pps CSE + 20 pps SF-3 + .9% CF-14 + 1 gal./ 100 sacks of Klay-Treat. Plug down to 10,113' @ 5:00 a.m. 01/06/93. Released rig and moved off location. 01/08/93

	ACCAPILA CARRODAD  (DRIG. SGD.) DAVID R. GL  (CARRODAD A 1993	RECEIVED  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 193  AREA 191 AM 1	_
14. I hereby certify that the foregoing is true and correct Signed	Drilling Superintendent	01/21/93	_
(This space for Federal or State office use)  Approved by Conditions of approval, if any:	Title	Date	_

Title 18 U.S.C. Section 1001, 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.

SEC	TWN 18	RGE 27		<b>A</b>	PI # 30 -	016-27163
OPERA'	ror MEW	BOHRNE OIL	<b>(</b> )			•
WELL 1	NAME CH	NLK BLUFF FEO C	om #3			
STATE	OCD TOPS	AS PER _ MARK	- ASIILEY			DATE /-25-93
Son		New Mexico		No. T. Ojo Alamo		n New Mexico
alt	-	T. Strawn	<i>व</i> 932	T. Kirtland-Fruitland		T. Penn. C
alt		T. Atoka-	9490	T. Picored Cliffs_	6.7	T. Penn. "D"
ates	450	T. Miss ———		T. Cliff House		T. Lezdville
Rivers	565	T. Devonian		T. Menefee		T. Madison
ueen	1159	T. Silurian		T. Point Lookout		T. McCracken
icayburg	1494	. T. Montoya		T. Mancos		T. Ignacio Otze
an Andres	1985	T. Simpson		T. Gallup		T. Granite
llorietz	3535	T. McKee		Base Greenhorn		T
addock		T. Filenburger		T. Dakora		T
Blinebry	4760	T. Gr. Wash		T. Todilto		T
Tubb	4760	T. Delaware Sand		T. Engada		Τ.
Orinkard	006	T. Bone Springs T. MOHOV LS	9710	T. Wingare		Т.
Abo Wolfcamo	5745 6475			T. Chinie		T
Penn	7979	_ <u>T.</u>		T. Permain		
Cisco (Bough C)		_ T		T. Penn "A"		T
CIACO (Bough C)		_ T	00000			
				ANDS OR ZONE		•-
				No. 3, from	***********	
o. 2. from			•••••••	No. 4, from		

IMPORTANT WATER SANDS

No. 2, from ______feet_____ 

REMARKS:

Include data on rate of water inflow and elevation to which water rose in hole.

Submit 5 Copies
Appropriate District Office
DISTRICT I P.O. Box 1980, Hobbs, NM 88240

## State of New Mexico Energy, Minerals and Natural Resources Department

## Revised 1-1-8 See Instructions

## OIL CONSERVATION DIVISION

P.O. Box 2088 Santa Fe, New Mexico 87504-2088 RECEIVED

OIL CONSERVATION DIVISION

ORIGINAL SIGNED BY

SUPERVISOR, DISTRICT H

MIKE WILLIAM

JAN 2 9 1993

DISTRICT II P.O. Drawer DD, Artesia, NM 88210

Jan 2 - 1593 DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 REQUEST FOR ALLOWABLE AND AUTHORIZATION O. C. D. TO TRANSPORT OIL AND NATURAL GAS Well API No. Operator 30-015-27163 Mewbourne Oil Company Address P.O. Box 5270 Hobbs, New Mexico 88241 Other (Please explain) Reason(s) for Filing (Check proper box) X New Well Change in Transporter of: Dry Gas Recompletion Oil Casinghead Gas Condensate Change in Operator If change of operator give name and address of previous operator II. DESCRIPTION OF WELL AND LEASE Lease No. Well No. Pool Name, Including Formation Kind of Leas SUMM. Federal or FACK NM-0557371 North Illinois Camp Morrow Chalk Bluff Federal Comm. Location Feet From The South 990 1980 East Line _ Feet From The . Unit Letter Township 18S Eddy 27E NMPM, County III. DESIGNATION OF TRANSPORTER OF OIL AND NATURAL GAS Address (Give address to which approved copy of this form is to be sent) Name of Authorized Transporter of Oil or Condensate 502 N. West Ave. Levelland, Tx. 79336-3914 Amoco Pipeline IPC Address (Give address to which approved copy of this form is to be sent)
P.O. Box 1188 Houston, Texas 77251 Name of Authorized Transporter of Casinghead Gas or Dry Gas Transwestern Pipeline Company
I Unit | Sec. If well produces oil or liquids, give location of tanks. Rge. Is gas actually connected? When? Unit Twp. Y<u>es</u> 18S 27E 01/15/93 I 1 If this production is commingled with that from any other lease or pool, give commingling order number: -None IV. COMPLETION DATA New Well Workover Deepea Plug Back Same Res'v Diff Res'v Oil Well Gas Well Designate Type of Completion - (X) Total Denth PRTD Date Compl. Ready to Prod. 11/24/92 10,102' 01/16/93 10,150' Top Oil/Gas Pay Name of Producing Formation Elevations (DF, RKB, RT, GR, etc.) **Tubing Depth** 99721 KB 3643' DF 3641' GL 3628' Lower Mornow 9950' Depth Casing Shoe 10,150' 9950'-9954' 9957'-9972' TUBING, CASING AND CEMENTING RECORD SACKS CEMENT **CASING & TUBING SIZE** HOLE SIZE Port ID-2 13-3/8" 400' 54.5# 100 sacks 17-1/2" 2-12-93 9-5/8" 2,600' 12-1/4" 250 sacks 36# comp + \$15 8-3/4" 8,968 1200 sacks <u> 26#</u> 6" 4-1/2" Liner 11.6#
7. TEST DATA AND REQUEST FOR ALLOWABLE 200 sacks 8.600' to 10.150' 2-3/8" & 2-7/8" (Test must be after recovery of total volume of load oil and must be equal to or exceed top allowable for this depth or be for full 24 hours.) OIL WELL Producing Method (Flow, pump, gas lift, etc.) Date First New Oil Run To Tank Date of Test Choke Size Casing Pressure Length of Test Tubing Pressure Gas- MCF Water - Bbls. Actual Prod. During Test Oil - Bbls. **GAS WELL** ate/MMCT Gravity of Condensate Actual Prod. Test - MCF/D Length of Test 30:1 24 Hrs. N/A 2000 MCF/D Tubing Pressure (Shut-in) Casing Pressure (Shut-in) Testing Method (pitot, back pr.) 10/64" 0 Back Pressure

INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

(505)

VI. OPERATOR CERTIFICATE OF COMPLIANCE

I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above

is true and complete to the best of my knowledge and belief.

Robert A Jones

Printed Name

01/19/93

1) Request for allowable for newly drilled or deepened well must be accompanied by tabulation of deviation tests taken in accordance

Title

Date Approved .

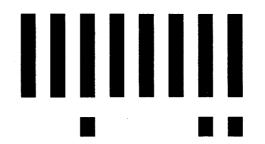
2) All sections of this form must be filled out for allowable on new and recompleted wells.

Engineer

Title

393-5905

- 3) Fill out only Sections I, II, III, and VI for changes of operator, well name or number, transporter, or other such changes.
- 4) Separate Form C-104 must be filed for each pool in multiply completed wells.







**Job separation sheet** 

FOR 1 PROVED OMPSIO. 1004-0137 pires, Occember 31, 1991 Form 3160-4 UNITED STATES OF SUBMIT IN PURISONS. (October 1990) Expires December 31, 1991

5. LEASE INSIGNATION AND REMAL DEPARTMENT OF THE INTERIOR structions or BUREAU OF LAND MANAGEMENTIA, HM 88210 Reverse side) NM-05 \$2371 WELL COMPLETION OR RECOMPLETION REPORT AND LOGS ALLOTTE THE TENT 1s. TYPE OF WELL: WELL X Other CAF O2-61 : KS L TYPE OF COMPLETION: 8. FARM OR LEASE NAME LES OVER DEED-WELL 2. NAME OF OPERATOR Chalk Bluff Fed. Comm. #3 9. API WELL NO. Mewbourne Oil Company 3. ADDRESS AND TELEPHONE NO. 30-015-27163 10. FIELD AND POOL, OR WILDCAT P.O. Box 5270 Hobbs, New Mexico 88241 (505) 393-59
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) New Mexico 88241 (505) 393-5905 N. Illinois Camp Morrow SEC. T. R., M., OR BLOCK AND SURVEY OR AREA At surface 1980' FSL & 990' FEL At top prod. interval reported below Sec. 1-T18S-R27E At total depth Same 12. COUNTY OR 13. STATE 14. PERMIT NO. DATE ISSUED Eddy 19. ELEV. CASINGHEAD 15. DATE SPUDDED 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* <u>01/06/</u>93 KB 3643' DF 3641' 11/24/92 GL 3628 MULTIPLE COMPL CABLE TOOLS 21. PLUG, BACK T.D., MD & TVI HOW MANT 10,102' 10,150' 24. PRODUCING INTERVAL(8), OF THIS COMPLETION-TOP, BOTTOM, NAME (MD AND TVD)* 25 WAS DIRECTIONAL SURVEY MADE 9950'-9954', 9957'-9972' Lower Morrow Orange Sand Yes 27. WAS WELL CORED 26. TYPE ELECTRIC AND OTHER LOGS BUN SDL-DSN Dual-Latero-MFSL-GR Sonic CBL No 28. CASING RECORD (Report all strings set in well) CASING SIZE/GRADE DEPTH SET (MD) HOLE SIZE TOP OF CEMENT, CEMENTING RECORD AMOUNT PULLED WEIGHT, LB./FT. 13-3/8" 400' 17-1/2" 54.5# 100 sx. Class None 9-5/8" 2,600'-12-1/4" 250 sx. Class 36# None 711 26 & 29# 8,968' 8-3/4" 200 sx "C & H" None 29 LINER RECORD 30. TUBING RECORD PACKER SET (MD) DEPTH SET (MD) SIZE TOP (MD) BOTTOM (MD) SACKS CEMENTS SCREEN (MD) SIZE 4-1/2" 8600' 10.150' 20<u>0 sxs</u> 2-7/8" 97971 None 2-3/8" 31. PERFORATION RECORD (Interval, size and number) ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED 9950'-9954' 9957'-9972' 9950'-9954' None None 4 SPF 19' 76 holes 33.* PRODUCTION WELL STATUS (Producing or shut-in) DATE FIRST PRODUCTION PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) 01/16/93 Producing Flowing DATE OF TRET HOURS TESTED CHOKE SIZE PROD'N. FOR OIL-BBL. GAS-MCF. WATER-BBL. GAS-OIL BATIO 10/64" 50 2000 01/16/93 24 40 MCF/BBL PLOW. TUBING PR CASING PRESSURE CALCULATED 24-HOUR RATE OIL---BBI. GAS-MCF. WATER--HBL. OIL GRAVITY-API (CORR.) 2000 60 34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY <u>Sold</u> Jones 35. LIST OF ATTACHMENTS

TITLE

Engineer

ll available records

DATE _01/21/93

rom

* Please hold in confidence

SIGNED _

that the foregoing and attached information is con

recoveries):	nciuding depth in	ilerval tested, cus	drill-stein, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):	38. GEOLO	GEOLOGIC MARKERS	
FORMATION	TOP	воттом	DESCRIPTION, CONTENTS, ETC.		TOP	ď
Morrow	9950'	16266	Sandstone	M M M M M M M M M M M M M M M M M M M	MEAS. DEPTH	TRUE VERT. DEPTH
	)	1		Yates	450'	,
				7 Rivers	564	
				Queen	1159'	
				Grayburg	1492'	
				San Andres	1985	
				Glorieta	3536	
				Tubb	4760'	
	3 - 154e -			Drinkard	5524	
	· ቴ ፡ -			Abo	5744	
				Wolfcamp	6474	
				Cisco	7686	
				Canyon	8440	
				Strawn	8932	
				Atoka	9490	
				Morrow	9594 '	,
				Morrow Clastic	,0086 3	
				L. Morrow	9911	

11

Σ̈́



## RECEIVED B.D. BOX 1498 ROSWELL

P. D. BOX 1498 ROSWELL, NEW MEXICO 88202-1498 505/623-5070

ROSWELL, NM

505/746-2719 ARTESIA, NM

10 52 AM 193

CARL AREA

January 06,1993

Mewbourne Oil Company P.O. Box 5270 Hobbs, N.M. 88240

RE: Chalk Bluff Federal #3

The following is a Deviation Survey on the above referenced well located in Eddy County, New Mexico.

4001		3/4°
400'	_	
887 '	-	1°
1359'	_	1°
1864'	_	2°
23361	_	1 1/2°
2600'	-	3/4°
2792'	-	1 1/4°
3086'	_	1°
3580'	-	1 1/3°
4079'	_	1°
4358'	-	1 3/4°
4846'	. –	2 3/4°

5813' 5875' 5967' 6094' 6217' 6720' 7213' 7685' 8155' 8654' 9003' 9509' 9837'		4° 4° 3 3/4° 3 3/4° 3 1/4° 3 1/2° 3° 2 1/2° 2 1/4° 2° 1/4° 3/4°
	_	3/4°
10150'	-	1 3/4° TD

Chappell Contracts Manager

STATE OF NEW MEXICO)

COUNTY OF CHAVES

The foregoing was acknowledged before me this O6th day of January 1993 by Gary W. Chappell.

MY COMMISSION EXPIRES

October 07,1996

RECEIVED JAH 0 7 1993

NOTARY PUBLIC

}	COMPANY UNIT:	:MEW8OURNE	OIL	LEASE SECTION	:CHALK BLU	JFF FED.CO	MWELL NO. TOWNSHIP:		1	Pc = 2273.2	Pc2 =	5167.4 *   *
	U. 1.		y .	9961		: 1	G/GMIX			Pt2 = 5031.9	Pw =	2244.7 * ; ;
	\$C02 :		%N2 :		H2S :		djulita .	DATE		1 0101	1 -	2199.5 *
	, , , , , , , , , , , , , , , , , , ,			:0.012892		: 8456.9		RANGE	•	1		2132.7 *
		. 2.2/0				. 0430.7		MANUL	. <i>41</i> ,	4053.0		2055.4 *
								• • • • • • • • • • • • • • • • • • • •		1 4033.0		*11
	<b>∆</b> : •	/	2274	2247.0			256U T242	.77 /		10-0 0 0- 100 4	0.0 -	
	VOL 1 :			2243.2			RESV.TEMP	1/3.6		Pc2-Pw2= 128.6	Pw2 =	5033.8 *
	VOL 2 :			: 2193.2					1	1 327.0		4837.6 * 1
	VOL 3 :			2113.2			SHUT-IN PR	2273.2		618.9		4548.6 *
	VOL 4 :	3294	PSIA 4	: 2013.2					1	942.6		,
												*!!
				PCR	: 668				1	n =	0.884	*   1
				TCR	: 401				i 1	1		<b>*</b>
									1	Pc2/(Pc2-Pw2) =	40.184	<b>*</b> 11
	LINE	RATE 1		RATE 2	!	RATE 3	1	RATE 4		1	15.666	*11
					!	t t	1	! !		1	8.350	<b>*</b> 11
		'IST	'2ND	'1ST	1 12ND	'ist	1 2ND	'1ST	'2ND '		5.482	* i i
				,   	1					I I		x
1	911	0.655	0.655	1.310	1.310	2.283	2.283	3.294	3.294			* ;
2	TW	534			•					[Pc2/Pc2-Pw2]n =	26.181	*!!
3	Ts	633.6		•	•	•	•				11.386	*
4	Ī	583.8				•					6.528	<b>≠</b> }}
. ,	PR (est)					3.16		3.01	· •	•	4.500	*
	Z(est)	0.727			•					•	7.300	<b>r</b>
6		424.5			-						17.148	<b>*</b>
	GH/TZ											
		19.924		*		19.391					14.915	*!! *!!
8		2.111		-	•	2.108					14.903	*!!
3	l-e-S	0.526					0.524				14.823	¥ ; i
10	Pt	2243.2		•								*11
	Pt2_/1000						4465.6					* i i i * i i i * i i i i i i i i i i i
12									0.0128924			*!
		5.472										* 1 1 * 1 1 * 1 1
14	FCGT	3.58										*
	L/H(FcQm)											*:1
									171.83059			K ( )
17	Pw2	5038.7	5038.8	4837.2	4837.5	4547.9	4548.6	4225.1	4224.8	l f Fi		x i 1
. 3					; 10123.1					L <b>T</b> I-1		<b>K</b> 1.1
19	25	3261.4	3243.4	3195.1	3181.7	3096.6	3090.0	2981.2	2982.3	1		¥ [ ]
20		2752.3					2601.6					<b>*</b> 11
21		4.12		4.03			3.89					KII
22		5		1,46		1.46		1.46				<b>T</b> 1
23					0.735			9,730				) : :
	::::::::::::::::::::::::::::::::::::::									::::::::::::::::::::::::::::::::::::::		



## **Laboratory Services**

1331 Tasker Drive Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR:

Mewbourne Oil Co.

Attention: Mr. R.Jones

P. O. Box 5270

Hobbs, New Mexico 88240

SAMPLE

IDENTIFICATION: Chalk Bluff #3 Mewebourne Oil Co.

COMPANY:

LEASE: PLANT:

SAMPLE DATA: DATE SAMPLED: 3/4/93 12:30PM GAS (XX)

ANALYSIS DATE:

PRESSURE - PSIG

SAMPLE TEMP. °F

ATMOS. TEMP. °F

03-05-93

530.0

SAMPLED BY:

ANALYSIS BY:

LIQUID ( )

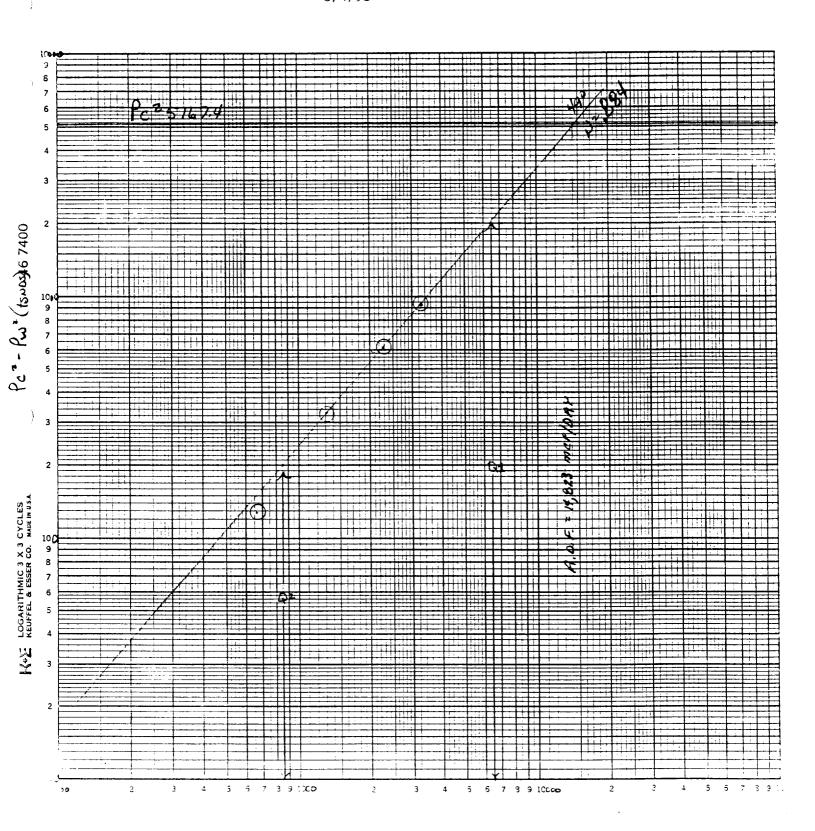
R. Jones Rolland Perry

REMARKS:

## **COMPONENT ANALYSIS**

COMPONENT		MOL FERCENT	GPM	
Hydrogen Sulfide	(H2S)			
Nitrogen	(N2)	0.33		
Carbon Dioxide	(002)	0.42		
Methane	(C1)	83.10		
Ethane	(C2)	8.14	2.164	
Propane	(C3)	3.14	0.862	
I-Butane	(IC4)	0.40	0.130	
N-Butane	(NC4)	0.86	0.270	
I-Pentane	(105)	0.39	0.140	
N-Pentane	(NC5)	0.41	0.147	
Hexane	(C6)	2.81	1.214	
Heptanes Plus	(C7+)	0.00	0.000	
•	•	100.00	4.927	
BTU/CU.FT DRY		1269	MOLECULAR WT.	21.1701
AT 14.650 DRY		1265	MOLLOOD III III.	••••
AT 14.650 WET		1239	26# GASOLINE -	1.591
		1298	20# 4110021142	
AT 15,025 DRY		1304		
AT 15.025 WET		1304	•	
SPECIFIC GRAVITI CALCULATE MEASURE	D	0.731		

MEWBOURNE OIL COMPANY Chalk Bluff Federal Com. Well #3 1-18S-27E Eddy County, New Mexico 3/4/93



Omer/Our

Lag - 200 - 2004 = 3.81291 Lag - 2005 = 2000 = 2.92942 Submit in duplicate to appropriate district office 33 See Rule 401% Rule 1122

## State of New Mexico Energy, Minerals and Natural Resources Department

Olst Le

Form C-122 Revised 4-1-91

## OIL CONSERVATION DIVISION

P.O. Box 2088 Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator		OINT AIN		<u> </u>		ase or Unit Na				
	URNE OIL	COMPANY				CHALK	BLUFF F		COM.	
Type Test_X Initial		Annual	Special		Te	3/4/93		Well No.	3	
Completion Date	Total	Depth		ig Back TD	E	levation			Sec TV	VP - Rge.
<u> 1/16/93</u>		10150		10102		GL 3628	3.'	I	11	18S 27E
,	Wt. d	Set A		rforations:				County		
4½	1			om: 9950	Te	o: 9954		EDI	DY	
		91 Set A		rforations:				Pool		RROW
				om: 9957		o: 9972	<del></del>	+		LINOIS
Type Well - Single - subgke	- Bradenhead - G	.G. or G.O. Mult	tiple	Packer S	et At 9797			Formation MOI	RROW	/
Producing Thru 1	Reservoir Temp.	°F Mean Anni	ıal Temp. ºF	Baro, Pro		. 2		Connection	on sweste:	m
1 H	950 ^{Gg}	.731 % CC	0 ₂ .42	% N ₂ .33	% H.S	· · · · · · · · · · · · · · · · · · ·	er	Meter Run 3.068		Taps flg.
	FLOW I	DATA			TUI	SING DATA		CASING DA	ATA	Duration
NO. Prover	Orifice	Press.	Diff.	Temp.	Press.	Temp			Temp.	of
NO. Line X Size	Size	p.s.i.g.	h _w	at,	p.s.i.g.	8Ł e	p.s.		∘F	Flow
SI	500	500			2260		Pk	r		48 hr.
1. 3 X 1. 2. 3 X 1.		530	5	148	2230		"			1 hr.
2. 3 X 1. 3. 3 X 1.		530 535	19 52	124 88	2180 2100		11			1 hr. 1 hr.
4. 3 X 1.		540	102	70	2000		19			1 hr.
5.	,,,,,	<u> </u>	1 2	1-7-	2000					
				ATE OF FLOW					T	
NO. COEFFICIE	R)	h _w P _m	Pressu P m	F	ow Temp. actor Ft.	Gravity Fa	Fac	Compress. tor, F pv.	C	e of Flow Q, Mcfd
1. 11.13 2 11.13		2.12 1.59	543.		248	1.17		043	65	
2. 11.13 3. 11.13		8.84	543.		436 7/1	1.1		049	1310	
4. 11.13	1	7.54	548. 553.		<u>741</u> 905	1.1		0 <u>66</u> 075	228 329	
5.			• درر	4 .9	907	1.1	/ 1.0	<i>313</i>	329	<u> </u>
NO. P _r	Temp. 2 R	T _r	Z	Gas Liquid Hy	drocarbon Rati	0	23.63		·	Mcf/bbl.
181	608	1.52	.919	A.P. L Gravity	of Liquid Hyd		57.0		1	Deg.
281	584	1.46	.909	1 -	ty Separator Ga		731			XXXXXX
<b>3</b> 82	548	1.37	.880	-	ty Flowing Flui	id 8	XXX		77	Mix .849
483	530	1.32	.865	Critical Pressu Critical Tempe	4V	401		P.S.L.A R	·	
5. P _c 2273.2	$P_c^2 = 516$	7.4	<u> </u>	Cilical range						^
n 2	· · · · · · · · · · · · · · · · · · ·		n2 n2	1) P _c ²	_ 5	.4821	(2)	P 2	<b>7</b> " =	4.500
NO. P _t ²	P _w	P _w ²	P _c ² - P _w ²		P 2		`	p ² . p ²	1	
1. 5031.9 2. 4810.1		5038.8	128.6	'c	~ w		L	Tc w	1	
2. 4810.1 3. 4465.6		4837.6 4548.6	329.8 618.9	AOF = Q	<b>r</b> p ²	2 <b>7</b> a =	14,823			
4. 4053.9		4224.8	942.6		$\frac{P_c^2}{P^2}$			<del></del>		
5.	=	,•0	7 13.0		L P c					
Absolute Open Flow	14,823	}		Mcfd @ 15.025	5 Angle o	f Slope O	49	S1	ope, n	884
Remarks: 13.	3 BBLS CC	NDENSATE	PRODUCE	ED DURING	TEST					
<del></del>					·					
t annual Dis Dissipi		ا مدید در ۵			Calculated I	2,,,		Checked	Rv.	
Approved By Division	JII.	Conducted	WELL TES	STERS	KS	٠,٠		KS	-,.	

## THI VESTERN COMPANIA CONDUCTION AND MERICA

## WATER ANALYSIS

## HOBBE, NEW MEXICO LAB

ANALYSIS #: HE010251

#### GENERAL INFORMATION

OPERATOR: Mewbourne Oil Company

DEPTH:

WELL:

Chalk Bluff Fed #3

DATE SAMPLED:

DATE RECEIVED:02/24/93

FIELD: FORMATION:

Eddy

SUBMITTED BY: Leonard Pounds

WORKED BY:

M Keith

COUNTY: STATE:

NM

PHONE #:

505-392-5556

SAMPLE DESCRIPTION: all water

## PHYSICAL AND CHEMICAL DETERMINATIONS

SPECIFIC GRAVITY:

70 °F 1.003 @

PH: 6.75

RESISTIVITY (MEASURED): 3

OHMS @ 0 °F

IRON (FE++):

150 PPM

SULFATE:

100 PPM

CALCIUM:

10 PPM

TOTAL HARDNESS:

50 PPM

MAGNESIUM:

6 PPM

BICARBONATE:

487 PPM

CHLORIDE:

1595 PPM 1243 PPM SODIUM CHLORIDE (CALC) TOT. DISSOLVED SOLIDS: 2624 PPM 3474 PPM

**SODIUM+POTASS:** KCL

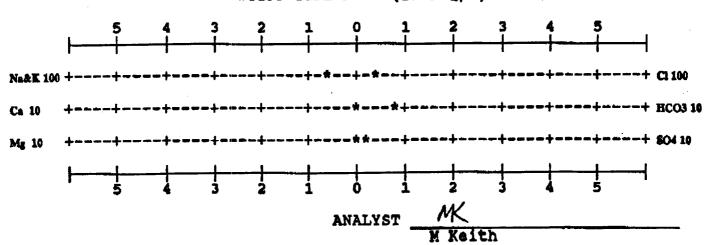
:no trace

OIL

:none

REMARKS:

## STIFF TYPE PLOT (IN MEQ/L)



Form 3169.5 (June 1990)

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Drawer DD Artesia MM 88610

FORM APPROVE: Budget Bureau No. 1064-6111 Expires: March 31, 1993

6. If Indian, Allottee or Tribe Name

5. Lease Designation and Seric No.

NM-0557371

UNDRY NOTICES	AND REPOR	RTS ON	WELLS
---------------	-----------	--------	-------

Do not use this form for proposals to drill or to deepen or reently to a different reservoir.

Use "APPLICATION FOR PERMIT— TOT:	such proposais	
SUBMIT IN TRIPLICATE		7. If Unit or CA, Agreement Designation
1. Type of Well Oil X Gas Other		8. Well Name and No.
2. Name of Operator  Mewbourne Oil Company	MENERAED	Chalk Bluff Fed. Com. #3  9. API Well No.
3. Address and Telephone No. P.O. Box 5270 Hobbs, New Mexico 88241	APR 2 6 1993	30-015-27163  10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)	C. C. D.	N. Illinois Camp Morrow 11. County or Parish, State
1980' FSL & <del>1980</del> ' FEL Sec. 1-T18S-P27F		Eddy Co N.M.

TYPE OF ACTION TYPE OF SUBMISSION Change of Plans Abandonment Notice of Intent New Construction

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

· · · · · · · · · · · · · · · · · · ·	Kecompiction	new construction
Subsequent Report	Plugging Back	Non-Routine Fracturing
	Casing Repair	Water Shut-Off
Final Abandonment Notice	Altering Casing	Conversion to Injection
	Other	Dispose Water
		(Note: Report results of multiple completion on Well

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

1) Formation: Morrow

2) Amount of water produced 10 BW/mo.

3) Water analysis attached

4) Water is stored on lease in fiberglass tank

5) Produced water will be trucked by I & W Inc.

6) The disposal well is I & W Inc., Walter Solt #1, Unit Letter L, Section 5-T18S-R28E Eddy County, New Mexico

SWD #318

4. I hereby certify that the foregoing is true and correct Signed Third Third	Title _	Production Engineer	Date	larch 4, 1993
(This space for Federal or State office use)  Approved by (ORIG. SGD.) DAVID R. GLASS	Title	PETROLEUM ENGINEER	Date	4/22/93
Conditions of approval, if any:  SEE ATTACHED	_			

Title 18 U.S.C. Section 1001, 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.

COMPANY	:MEWBOURNE	OIL	LEASE	:CHALK BL	JFF FED.CO	MWELL NO.	: 3	ı	11	Pc2 =	
UNIT:	I		SECTION	i		TUMBODIE	: 15	i	İ		*1
L:	9961	Н	9961	L/H	: 1	G/GMIX			1 762 - 3001.7	Pw =	•
%CO2 :	0.42	%N2	: 0.33	H2S	1 1		DATE	: ,	4810.1		2199.5 *
d:	2.278	Fr	:0.012892	GH	: 8456.9		RANGE	: 27			2132.7 *;
:::::::::::	:::::::::	::::::::	::::::::	::::::::	::::::::			::::::::;	4053.0		2055.4 *
								,	: 1		* 1
VOL 1 :	655	PSIA 1	: 2243.2			RESV. TEMP	173.6		Pc2-Pw2= 128.6	Pw2 =	5038.8 *
VOL 2 :			: 2193.2						329.8		4837.6 *
VOL 3 :			: 2113.2			SHUT-IN PR	2273.2	:	618.9		4548.6 *
			: 2013.2			J.,, C. 1	22,012	i	1 942 4		4224.8 *
VOL 4:	3274	POIM 4	. 2013.2					i	1		*
			000	. (/6					n =	100 A	* ;
	*		PCR					1	:	V.004	
			TCR	: 401				i		46 464	*
				i		1	1 5.77	,	Pc2/(Pc2-Pw2) =		*
LINE	RATE 1		RATE 2	1	RATE 3	!	RATE 4		•	15.666	* !
			! !	!	1	· ·	!	i		8.350	* 1
:	'1ST	'2ND	'1ST	1 ' 2ND	151	'2ND	' 1ST	I ZNU i	•	5.482	* 1
	! !		 	! !	 	! !	! !	i	<b> </b>   <del> </del>		*
1 QM	0.655	0.655	1.310	1.310	2.283	2.283					* 1
2 T₩	534	534	534	534	534	534	534	534	[Pc2/Pc2-Pw2]n =	26.181	*;
3 Ts	633.6	633.6	633.6	633.6	633.6	633.6	633.6	633.6		11.386	*;
4 T	583.8		•	583.8	583.8	583.8	583.8	583.8	{ 	6.528	* [
PR (est)	•		3.28		3.16	1	3.01	1	11	4.500	*1
5 I(est)	0.727		•		0.728						*
	424.5		•	•			•	•	ADF= Q	17.148	*İ
	19.924	•	•	•	•	•	•			14.915	*
	2.111				•	•	•			14.903	*!
			•	-	•	•	-	-		14.823	*
	0.526	•			•	•	•			17.020	*{
0 Pt	2243.2	•	*		•	•					†ί •1
1 Pt2 /1000	5031.9	5031.9									*1 +1
	*	•						0.0128924			*!
3 Fc=FrTZ				•							* [
4 FcQm											* ! * !
5 L/H(FcQm)		13.2	51.4								*!
6 FW								171.83059			* 1
7 Pw2	5038.7										* !
8 Ps2	10636.7	10519.8	10208.7		9588.7		•				* !
9 Ps	3261.4	3243.4	3195.1	1 3181.7	3096.6	3090.0	2981.2	2982.3			*
0 P	2752.3			2687.4	2604.9	2601.6	2497.2	2497.8	l f l i		*
1 Pr	4.12	•					3.74	3.74	1 J 1 <del>1</del>		*!
2 Tr	1.46						1.46	1.46	11		*
23 I	0.738									ORM C122-	
	, ,,,,,,,,	,			,		• • • • • •	•	• •		:::::::*



## **Laboratory Services**

1331 Tasker Drive Hobbs, New Mexico 88240

Telephone: (505) 397-3713

Mewbourne Oil Co.

Attention: Mr. R.Jones

P. O. Box 5270

Hobbs, New Mexico 88240

SAMPLE

IDENTIFICATION: Chalk Bluff #3

COMPANY:

Mewebourne Oil Co.

LEASE: PLANT:

SAMPLE DATA: DATE SAMPLED:

03-05-93

3/4/93 12:30PM GAS (XX) SAMPLED BY:

LIQUID ( )

ANALYSIS DATE:

PRESSURE - PSIG

530.0

R. Jones ANALYSIS BY: Rolland Perry

SAMPLE TEMP. "F

ATMOS. TEMP. °F

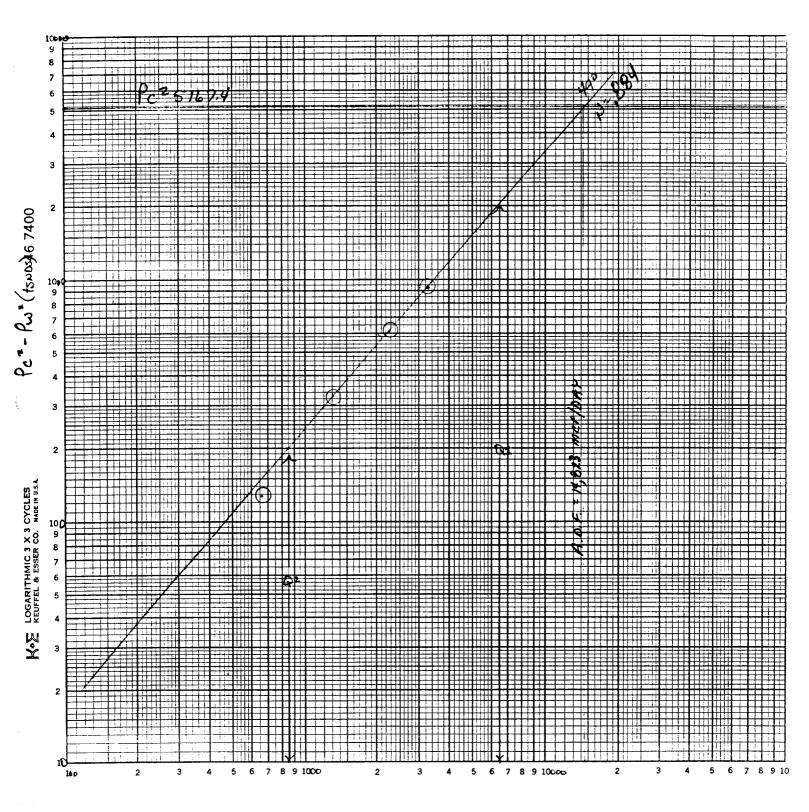
**REMARKS:** 

## **COMPONENT ANALYSIS**

MOL

		MOL		
COMPONENT		PERCENT	GPM	
Hydrogen Sulfide	(H2S)			
Nitrogen	(N2)	0.33		
Carbon Dioxide	(CO2)	0.42		
Methane	(C1)	83.10		
Ethane	(C2)	8.14	2.164	
Propane	(C3)	3.14	0.862	
I-Butane	(IC4)	0.40	0.130	
N-Butane	(NC4)	0.86	0.270	
I-Pentane	(105)	0.39	0.140	
N-Pentane	(NC5)	0.41	0.147	
Hexane	(C6)	2.81	1.214	
Heptanes Plus	(C7+)	0.00	0.000	
	• •	100.00	4.927	
BTU/CU.FT DRY	<i>(</i>	1269	MOLECULAR WT.	21.1701
AT 14.650 DRY	,	1265		
AT 14.650 WET		1239	26# GASOLINE -	1.591
AT 15.025 DRY		1298		
AT 15.025 WET		1304		
SPECIFIC GRAVIT	Y <b>–</b>			
CALCULATE		0.731		
MEASURE				

MEWBOURNE OIL COMPANT
Chalk Bluff Federal Com. Well #3
1-18S-27E
Eddy County, New Mexico
3/4/93



Q mcf/DAY

Log Q1=6500:L09=3.81291

Log Qz = 850: Log = 2.92942

5100F N=,88349 = .884

Submit in duplicate to appropriate district office See Rule 401 & Rule 1122

## State of New Mexico Energy, Minerals and Natural Resources Depc

RECEIVED

Form C-122 Revised 4-1-91

## OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

LPR 0 6 1993

		MU	LTIP	OINT ANI	O ONE	POIN	T BACK					S WE			
Operator	MEW O	URNE	OIL	COMPANY	/			]		Unit Name HALK BLU	JFF FI	EDERAL.	COM.		
Туре Те				nnual	Spec	-ial		,	Test Dat			Well No.			
Comple	tion Date		Total I	Depth	open	Plug Back		1	Elevatio	n		Unit Ltr.	- Sec 1		-
1/	16/93			10150		Perforation	102		GL	_3628'		County	1	18S	27E
Csg. Siz	æ \	Vt.	d	Set A	500	Periorano	ms:					County			
$4\frac{1}{2}$		10.	1		500 0150	From:	9950		То:	9954			DDY		
Tbg. Siz	²⁶ 7/8	4.7	§ d 1.	91 Set A	t	Perforation	ons:					Pool	M	ORROW	
2 3/8	8 &	6.5	2.	441 99	972	From:	9957		То:	9972		N	ORTH II	LINO	[S Cap
Type W	ell - Single -	Braden	head - G.	G. or G.O. Mul	tiple		Packer Set	At 9797	7			Formatic M	n ORROW		
súbgl		Perervoi	r Temp 9	F Mean Ann	nal Temp.	ΣΕ	Baro, Press	- P			- <del></del>	Connec	tion		
tbg.	ng Thru	13	Temp. ⁹	60	_			13	3.2	<del> ,</del>		Trai	nsweste		
9950	н 9	950	Gg	.731 % CC	.42	% 1	[№] 2 .33	% H ₂	S	Prover		Meter Ru 3.00	m 58	Taps f.	lg.
			FLOW I	DATA	T			TU	BING	DATA	C	ASING I	DATA	_ Du	ration
	rover ine X	Orifi	ce	Press.	Diff	1	Temp.	Press.	1 .	Temp.	Pres		Temp.	!	of
	Size	Siz	e	p.s.i.g.	h _w		a.E	p.s.i.g		ōŁ.	p.s.i		₽F		low
SI	A 4	<u> </u>		500	<del> </del> _		1/0	2260			Pkr ''	•			hr.
1.	3 X 1.			530	5 19		148 124	2230 2180			11			$\frac{1}{1}$	hr.
2.	3 X 1.			530 535	52	<del></del>	88	2100			11			+ +	hr.
4.	3 X 1.			540	102		70	2000			***			$\frac{1}{1}$	hr.
5.	<u> </u>	<u> </u>		310	1 2 2			2000							
							F FLOW C		T -				_		
	COEFFICIE				Pr	essure P _m	Flow	Temp. or Ft.	Gr	avity Factor Fg.		Compress.	1	ne of Flo	w
NO.	(24 HOU)	R)		h _w P _m 2.12		3.2	.924			1.170	1.0	or, F pv.	65	Q, Mcfd	
2.	$\frac{11.13}{11.13}$			$\frac{2.12}{1.59}$		3.2	.943		+	1.170	1.0		131		
3.	11.13			8.84		8.2	.974			1.170	1.0		228		
4.	11.13		23	7.54		3.2	.990			1.170	1.0		329		
5.															
200	P _r	Tem	p. º R	T _r	Z	Gas	Liquid Hydn	ocarbon Ra	tio	23.6				M	cf/bbl.
NO	.81	60	8	1.52	.919	, ,	. L Gravity of	-			57.0		<del></del>		Deg
2.	.81	58		1.46	.909	Spe	cific Gravity	-		.731				XXXX	
3.	.82	54		1.37	.880	Spe	cific Gravity	Flowing Flowing 66	uid 58		XXXX		60	Mix 4	_849 _p.s.i.a
4.	.83	53		1.32	.865	Cni	ical Pressure_ ical Tempera		401			P.S.L.	42		.F.3.1.A.
5.				<del></del>		Cin	Icai Tempera								
P _e 22	73.2	P _c 2	516	7.4			n 2		.482	1	<b>(0)</b>	D 2	_ n	4 50	m
NO.	P _t ²		P _w	P _w ²	P _c ² - P	2 1)			7.402	<u>.T.</u>	⁽²⁾ [-	$\frac{P_c^2}{Q_c^2 - P_w^2}$	_]	7.00	<u></u>
1.	5031.9	4	44.7	5038.8	128.		$\overline{P_c^2 - P_v}$	v 2			L	) - P 2	]		
2.	4810.1	21	99.5	4837.6	329.	8		_ =	, .	_ , 1/	823				
3.	4465.6		32.7	4548.6	618.		OF = Q	[P	<u> </u>	] = <u>1</u> 2	,,023				
4.	4053.9	20	55.4	4224.8	942.	b		$P_c^2$	- P _w ²	J					
5.	O El-	. 1	4,823			Mofe	1@ 15.025	Angle	of Slope	θ 49		S	lope, n	884	
Absolut	e Open Flow				DDODE			1					F-1		
Remark	s:13.	3 BB	LS CO	NDENSATE	PRODU	NED D	DKTING TI	アンT			·······	<del></del>	<u> </u>		
				·											
A	ed By Divisi	on		Conducted	l Bv:			Calculated	By:			Checked	By:		
White	J. 27 22.131					ESTER		KS	-			KS			
				1											

Form 3160-5 (June 1990)

## **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

N.M. Oil . TS DIVISION FORM APPROVED

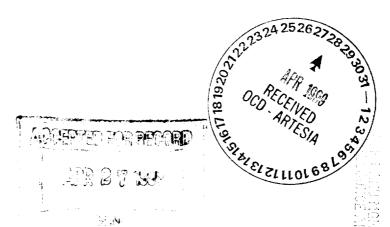
Budget Bureau No. 1004-0135 Expires: March 31, 1993

	Artesia No.	NM 0557371
	P44 17 20 1 11 1	1410 0557 57 1
DOVINGTIONS AND DEDODES ON MELL	•	

SUNDRY NOTICES AND REPORTS ON WELLS  Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  Use "APPLICATION FOR PERMIT-" for such proposals		NM 0557371	
		6. If Indian, Allottee or Tribe Name	
SUBMIT	IN TRIPLICATE	7. If Unit or CA, Agreement Designation	
1. Type of Well Oil Well Well Other  2. Name of Operator		8. Well Name and No. Chalk Bluff Fed. <del>Comm.</del> #3	
Mewbourne Oil Company  3. Address and Telephone No.		9. API Well No. 30-015-27163	
P. O. Box 5270, Hobbs, NM 88241 505-393-5905  4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 1980' FSL & 990' FEL of Section 1, T18S, R27E		10. Field and Pool, or Exploratory Area N. Illinois Camp Morrow	
		11. County or Parish, State	
12. CHECK APPROPRIATE BOX(s	s) TO INDICATE NATURE OF NOTICE, REPORT, C		
TYPE OF SUBMISSION	TYPE OF ACTION		
Notice of Intent	Abandonment	Change of Plans	

	✓ ★ Recompletion	TIACAA CONSTITUCTION
Subsequent Report	☐ Plugging Back	Non-Routine Fracturing
	Casing Repair	Water Shut-Off
Final Abandonment Notice	☐ Altering Casing	Conversion to Injection
_	Other	Dispose Water
		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinet details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markders and zones pertinent to this work.)* Add Morrow perforations 9860' to 9870'.



ORIG. SGD.) GARY GOURLEY

14. I hereby certify that the foregoing is true and correct				
Signed ( Kelly 6 Lev 5	Title	District Manager	Date	04/15/99
(This space for ederat of State office use)  Approved by  Conditions of approval, if any:	Title		Date ₋	

Title 18 U.S.C. Section 1001, 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.

30-015-27163

**⊗ ESSELTE** 

MADE IN U.S.A.

NO. R753 1/3

R-9760 SD + NSL 11-4-92

1-21-93 Spectral Dimoity Dual Spaced Mustron 63651-84671 400'- 10,100'

Comp. Sonic Log.

Dual renduction Lateralg

Qual Lat. 63651-84671 8968'-10,143'

MSY Jamma Collar CBL Log 1340' - 10,069'

NSL- R-9760



# NAVAJO REFINING COMPANY Map ID No. S Artificial Penetration Review

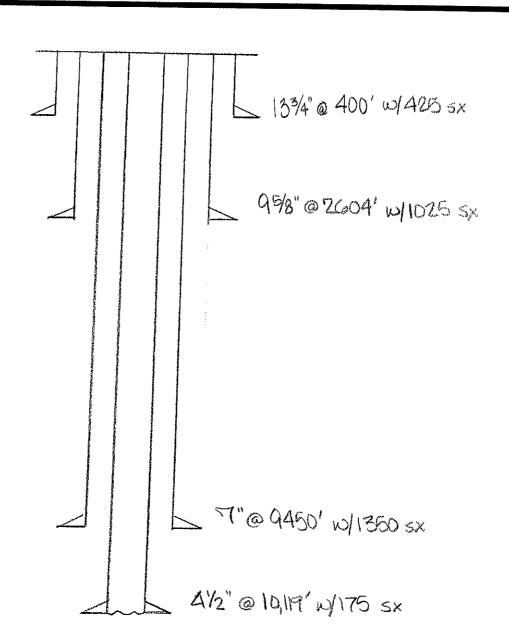
OPERATOR Navajo Refining Co.  LEASE WDW LOCATION Sec. 6 -T18S-R27E  WELL NUMBER 3 MUD FILLED BOREHOLE NA  DRILLED 12-22-90 TOP OF INJECTION ZONE 7319'  PLUGGED NA API NO. 30-015- 26575	
REMARKS: Calc. Top of Cement Denind 7"@384'  133/4"@400' w/425 5x  95/8"@2604' w/1025 sx	
7"@9450' W/1350 sx 41/2"@10,119'W/175 sx	



NAVAJO REFINING COMPANY, L.L.C. Map ID No.  $Q(\rho)$  Artificial Penetration Review

OPERATOR Navajo Refining Co.	status Active
LEASE WDW J	LOCATION Sec. 6-T18s-R27E
WELL NUMBER 3	MUD FILLED BOREHOLE -
DRILLED NA	TOP INJECTION ZONE -3694'
PLUGGED N/A	API NO. 30-015-26575

## REMARKS:



MAP ID NO. 96

NAVAJO REFINING COMPANY WASTE DISPOSAL WELL NO. 3

API NO. 30-015-26575

Form 3160-5 (June 1990)

## **UNITED STATES** DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

N.M. C.. Cons. Division
FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

Artesia, NM 88210-2834tion and Serial No.

SUMPRY NOTICE	TO ARID DEPOSITO CALLAGE I A	NM-0557371
Do not use this form for proposals to o	S AND REPORTS ON WELLS  drill or to deepen or reentry to a different reserved.  OR PERMIT-" for such proposals	6. If Indian, Allottee or Tribe Name
SUBMI	T IN TRIPLICATE	7. If Unit or CA, Agreement Designation
. Type of Well		
Oil Gas Well Well X Other		8. Well Name and No.
Name of Operator		Chalk Bluff Federal Comm #1
Mewbourne Oil Com[any Address and Telephone No.		9. API Well No.
PO Box 5270, Hobbs, NM 505-393-5905		30-015-26575
Location of Well (Footage, Sec., T., R., M., or Survey D	Pscription)	10. Field and Pool, or Exploratory Area
		N. Illinois Camp Morrow
790' FSL & 2250' FWL, Sec.1 T-18S R-27E		11. County or Parish, State
		Eddy, NM
CHECK APPROPRIATE BOX(	s) TO INDICATE NATURE OF NOTICE, REPORT	T, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTIO	)N
Notice of Intent	Abandonment	Change of Plans
com.	Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing
grown	Casing Repair	Water Shut-Off
[_] Final Abandonment Notice	Altering Casing	Conversion to Injection
		<u></u>
	Other MIT	Dispose Water
The above caption well was successfully MIT	state all pertinet details, and give pertinent dates, including estimated disured and true vertical depths for all markders and zones pertinent to the	Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)  late of starting any proposed work. If well is this work.)*
B. Describe Proposed or Completed Operations (Clearly a directionally drilled, give subsurface locations and mea The above caption well was successfully MIT The pressure chart is enclosed.  If any question, please call.	state all pertinet details, and give pertinent dates, including estimated d isured and true vertical depths for all markders and zones pertinent to the true of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)  late of starting any proposed work. If well is this work.)*
The above caption well was successfully MIT The pressure chart is enclosed.	state all pertinet details, and give pertinent dates, including estimated d isured and true vertical depths for all markders and zones pertinent to the true of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control	(Note: Report results of multiple completion on West Completion or Recomplation Report and Log form.)
The above caption well was successfully MIT The pressure chart is enclosed. If any question, please call.  I hereby certify that the foregoing is true and correct great of Federal or State office use)	state all pertinet details, and give pertinent dates, including estimated discred and true vertical depths for all markders and zones pertinent to the fried on 10/25/2000. (500 psi for 30 min.)  ACCEPTED FOR RECORD NOV 1.5 2000  BLM  Title N.M. Young District Manager	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)  late of starting any proposed work. If well is this work.)*
The above caption well was successfully MIT The pressure chart is enclosed. If any question, please call.  I hereby certify that the foregoing is true and correct med	state all perfinet details, and give pertinent dates, including estimated discred and true vertical depths for all markders and zones perfinent to the first of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of the date of th	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)  late of starting any proposed work. If well is this work.)*  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  **COD - ARTESIA**  *

2250 FWL ATE ENDICA NIM NIM 0557371 Mark Town Chalk Bluff FEO #1

RECEIVED

Form 3160-5 (Jene 1990)

## UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

1991 U X NUL;

FORM APPROVED Budget Bureau No. 1004-0135

Expires: March 31, 1993

5. Lease Designation and Serial No. O. C. U. NM-0557371 ARTESIA, OFFICE SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT—" for such proposals 6. If Indian, Allottee or Tribe Name 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE 1. Type of Well Oil S Well Other 8. Well Name and No. 2. Name of Operator CHALK BLUFF FED. COM #1 Mewbourne Oil Company 9. API Well No. 3. Address and Telephone No. 30-015-26575 P. O. Box 7698, Tyler, Texas 75711 10. Field and Pool, or Exploratory Area 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) No. Illinois Camp Morrow 2250' FWL & 790' FSL of Sec. 1, T18S-R27E 11. County or Parish, State Eddy, New Mexico CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12, TYPE OF SUBMISSION TYPE OF ACTION Notice of Intent Abandonment Change of Plans Recompletion **New Construction** X Subsequent Report Plugging Back Non-Routine Fracturing Casing Repair Water Shut-Off Final Abandonment Notice Altering Casing Conversion to Injection Momer_Tracture Treat Dispose Water (Note. Report results of multiple completion on Well 13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

4/24/91 - Western fracture treated Morrow Sand perfs 9936-46', 9964'67' down tubing with 16,000 gals 73 downhole slurry quality Binary Westfoam carrying 16,000# 20/40 mesh ACFRAC Black Westprop-3. Screened out with 545 gals CO₂/N₂ 2% KCL water. Screened out at 10,100% with 1200 gals of 3% stage in formation and 545 gals flush in tubing. Pumped 116 sxs Proppant into formation and left 25 sacks in casing and 19 sacks in tubing. ISDP 8300%, 5 mins 7600%, 10 mins 7200%, 15 mins 6800%. Avg 10.0 BPM at 8200%. Job complete 10:20 AM.

**ACCEPTED FOR RECORD** 

I hereby certify that the furgoing is seen of		CHILDDAD, NEW MEXICO
. I hereby certify that the typegoing is strong whit sources  Signed May Many 1000	Title Engr. Oprns. Secretary	Date 5/21/91
(This space for Federal or State office use) Approved by Conditions of approval, if any:	Title	Date

Title 18 U.S.C. Section 1001, 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.

NM OIL CONS COMMISSION Drawer DD Artesia, NM APROVED **UNITED STATES** Form 3160-5 Budget Bureau No. 1004-0135 (June 1990) DEPARTMENT OF THE INTERIOR Expires: March 31, 1993 BUREAU OF LAND MANAGEMENT 5. Lease Designation and Serial No. NM-0557371 SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allottee or Tribe Name Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT-" for such proposals 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE FER 2 1 1994 1. Type of Well Oil Gas Well Well 8. Well Name and No. Chalk Bluff Fed. Com. #1 2. Name of Operator 9. API Well No. Mewbourne Oil Company 30-015-26575 3. Address and Telephone No. 10. Field and Pool, or Exploratory Area P.O. Box 5270 Hobbs, New Mexico (505) 393-5905 88241 N. Illinois Camp 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 11. County or Parish, State 2250' FWL & 790' FSL Sec. 1-T18S-R27E Eddy Co., N.M. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12 TYPE OF ACTION TYPE OF SUBMISSION Notice of Intent Abandonment Change of Plans Recompletion **New Construction** ___ Subsequent Report Plugging Back Non-Routine Fracturing Water Shirt-Off Casing Repair Final Abandonment Notice Altering Cosing Other Shut-In-Status Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) 13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) Mewbourne Oil Company here by requests temporarily abandon status pending further evaluation of the lease for the above well. The well was spudded 12/22/90. APPROVED FOR 12 MONTH PERIOD ENDING_ Tide Petroleum Engineer

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to say department or agency of the United States any false, fictitious or frandulent statements or representations as to any matter within its jurisdiction.

PETROLEUM ENGINEE

(This space for Federal or State office

Approved b(ORIG SCD.) JOE Q. LAW

*See Instruction(文字形成形成形成形形) MEXICO

FORM APPROVED п 3160-5 **UNITED STATES** Budget Bureau No. 1004-0135 : 1990) DEPARTMENT OF THE INTERIOR Expires: March 31, 1993 BUREAU OF LAND MANAGEMENT 5. Lease Designation and Serial No. NM-0557371 SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allottee or Tribe Name Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT-" for such proposals 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE i. Type of Well Oil Well Gas Well 8. Well Name and No. 2. Name of Operator Chalk Bluff Fed. Com. #1 Mewbourne Oil Company 3. Address and Telephone No. 30-015-26575 10. Field and Pool, or Exploratory Area P.O. Box 5270 Hobbs, New Mexico
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 88241 (505) 393-5905 N. Illinois Camp 11. County or Parish, State 2250' FWL & 790' FSL of Sec. 1-T18S-R27E Eddy Co., N.M. 12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Notice of Intent Abandonment Change of Plans Recompletion **New Construction** Subsequent Report Plugging Back Non-Routine Fracturing Water Shut-Off Casing Repair Final Abandonment Notice Altering Casing Conversion to Injection ___ Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) 13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)* 09/08/93 Abandon Morrow Perfs 9861' - 9967' - Set CIBP @ 9800' - cover w/35' cement. - Recomplete in Cisco Formation - Test & evaluate. - If unecomomical recomplete in Wolfcamp - Test & evaluate. 14. I hereby certify 09/07/93 Petroleum Engineer Title (This space for Federal or State office use) (ORIG. 'SGD.) JOE G. LARA

Title 18 U.S.C. Section 1001, 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.

Title

pproved by

onditions of approval, if any:

PETROLEUM ENGINEER

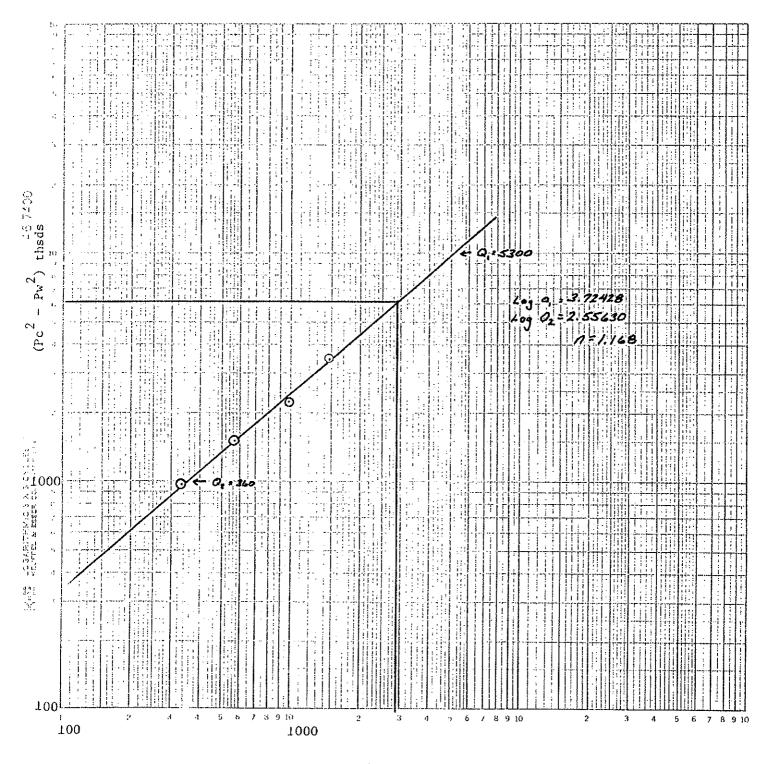
RECEIVED Corn: 3160-5 UNITED STATES FORM APPROVED inc 1990) Budger Hureau No. 1004-0135 SEP 2 8 1992 DEPARTMENT OF THE INTERIOR Expires: March 31, 1993 **BUREAU OF LAND MANAGEMENT** 5. Lease Designation and Serial No. NM-0557371 SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allonce or Tribe Name Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE 1. Type of Well Oil Well Other 8. Well Name and No. 2. Name of Operator Chalk Bluff Fed.Com.#1 Mewbourne Oil Company 9. API Well No. 3. Address and Telephone No. 30-015-26575 P. O. Box 7698, Tyler, Texas 75711 (903) 561-2900 10. Field and Pool, or Exploratory Atea 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) N.Illinois Camp-Mor.-Gas 11. County or Parish, State 2250' FWL & 790' FSL Sec. 1, T18S-R27E Eddy CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12. TYPE OF SUBMISSION TYPE OF ACTION Notice of Intent Abandonment Change of Plans Recompletion New Construction Subsequent Report Plugging Back Non-Routine Fracturing Casing Repair Water Shut-Off Final Abandonment Notice Altering Casing Conversion to Injection Other Additional perfs. Dispose Water (Note. Report results of multiple completion on Well acidize & frac 13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)* 8/13/92 - Perf Middle Morrow 9861-9882*, 2 SPF, 10* Net, 22 holes. 8/14/92 - Acidized w/3500 gals 7½% HCL + additives + 1000 SCF/bbl nitrogen carrying 80 ball sealers. Flushed w/2% KCL wtr + 1000 SCF/bbl nitrogen. ISDP 4300#, 5 mins 3800#, 10 mins 3400#, 15 mins 2800#. Avg rate 3.7 BPM, AP 5000#, MP 5600#. Blew well down to pit 8/15 - 8/18/92. 8/19/92 - MI swab unit. Pressure tested the to 2000 . Held OK. Removed tree. RU BOP. RU swab. Swabbed well down to 5300'. 8/20/92 - Swabbed down to 6500'. POOH w/tbg & pkr. TIH w/new pkr assembly & 200 jts tbg. Tested the to 8000#. 8/21/92 - Continued testing the Set pkr @ 9740.68 w/15 pts compression. Press annulus to 2000f. Held OK. Started swabbing. Had light blow of gas. 8/22/92 - RU Western Co. Acidized perfs w/1500 gals 7½% HCL acid + additives + 1000 scf/bbl nitrogen + 35 ball sealers. Flushed w/2% KCL wtr. ISDP 400#. 5 min 3700#, 10 min 3700#, 15 min 3600#. ATP 5100#, MTP 5400#. RD Western. Opened well to pit on 12/64" choke. No show of gas or oil. Recovering load. 8/23/92 - RU swab. FL @ 7000'. Swabbed dry in 3 runs. Continued swabbing. Recovering load. 14. I hereby certify that the fugegoing by true was

Approved by Conditions of approval, if any: Title  $B > \mathbb{R}^{n}$ 

Title Engr. Oprns. Secretary

9/11/92

			MULT	IPOINT A	ND	ONE PO	INT BAC	K PRES	SURE	: IE3	I rur	COAS	MELL !	<u>RECE</u>	IVED
Typ	· Yest									l'eni (Ja					
1		] Initial			<u> </u>	innual		Spec					Bay :	. 7	va 111 101
	.bar.k					Connection		n	R	îÇe.,		1	HAI	3 1	46 All '91
	Mewbour	<u>ne 0i</u>	L Com	pany V		Formation	swester	11	ω. Δ΄	V - 7	1991	Unt	CALL.		5.50
Poo	th Illi	esign		Morrow			Morro	W					<b>A</b> R2∧		1 81.5
	pletion Date			Catal Cepth		<u></u>	Plug Bock	TD		).√Cu		Fax	n or Lea:	se Name	
•	3/05/91			10.12	0 <b>'</b>		10. Perforacio	0751	ANI	ESIA	ggh:	C	halk No.	Bluff	Federal
Cag	· \$12/2"	Wi.	. "	<b>a</b>	Set	At	Perforation From	9936¹	Ťa		9967.	701	1		
	51/-	Ll.	.6#	di	Eat	LO, 120'	Perforation				7701	Unii	Sec	. T	vp. Roje.
	7/8"		.5			9,805'	From	0pen	То		End	N	1	1	8S · 27E
TYE	e Well - Sing	le - Brad	enhead	G.G. or G.C	). Mu	iltple	<u> </u>	Packer Ed	t At			Cou	•		
	Singl	e Gas							980	<u>5!</u>		Stat		<u>ddy</u>	
F 100	lucing Thru	i		olt Temp. *F	ł	Mean Annua		L	3.2	á		3.01	•	Mexic	0
	Tbg.		148	• 10,12	20	* CO 2	2   N N 2		3. Z % H ₂ S		Provet	l M	iter Run		dpa .
	00/0	H	949	.660	, I	43		.42		.		13	.068		Fig.
	9949	<u> </u>		OW DATA						ATA		CASIN		A	Duration
L.	Prover	х (	Orllice	Prass.	T	Diff.	Temp.	Presi		Tem.	p.	Press. p.s.l.g.		emp. • r	of Flow
Ю.	Line Size		Site	p.s.i.q.	$\perp$	hw	·F	p.m.t.				p. w. 1. Q.			72 Hr.
SI	S.I				- -		51	2380 217				Pkr.	_	······	1 Hr.
1.	3 X 1.			426.8			51	207				Pkr			1 Hr.
3.	$3 \times 1$			446.8 446.8	十	32	51	190				Pkr			1 Hr.
4.	$\frac{3 \times 1}{3 \times 1}$	$\frac{125}{125}$		426.8		7.2	45_	160				Pkr		<del></del>	1 Hr.
5.		<del></del>						l		1	i		- 1		<u> </u>
	1			<del></del>											
	1		······································			RATE	FFLOW		1			Suna			
	Coelli	cleal	<u> </u>	~/. B	.	Pressure	Flor	w Тетр.	1	Oreally Pactor		Super Compre	•		e of Flow
29.	Coelli (24 H			√h _w P _m			Flor		1	Gravity		•			e of Flow ), Meid
×9.		our)	-4	1.952		Pressure Pm	Flor	v Temp. defor Ft.		Gravity Factor Fa		Compre Factor,	Fpv		337
	(24 H	our)	4			Pressure Pm	Fion F	Temp. Tector Fu .009		Gravity Pactor Fa 1.225		Compre Factor, 1.048 1.051	Fpv		337 574
1	6.217 6.217 6.217 6.217	our)	12	1.952 1.134 1.326		Pressure Pm 44( 46(	Flor	Tomp.  Getor Ft009 .009		Greatly Factor Fa 1,225 1,225		Compre Factor, 1.048 1.051	Fpv		337 574 980
1 2. 3 4.	6.217 6.217	our)	12	1.952 1.134		Pressure Pro 44( 46(	Flor	Temp. Tector Fu .009		Gravity Pactor Fa 1.225		Compre Factor, 1.048 1.051	Fpv		337 574
1 2. 3	6.217 6.217 6.217 6.217	owi)	1.2	1.952 1.134 21.326 27.989		Pressure Pm 446 446 446 446	Flor	Temp.  Getor Ft009 .009 .009		Gravity Factor Fq 1.225 1.225 1.225		Compre Factor. 1.048 1.051 1.051	Fpv		337 574 980
1 2. 3 4.	6.217 6.217 6.217 6.217	our)	1.2	1.952 1.134 1.326		Pressure Pm 440 460 460 440	Flor	Temp.  detor Ft009 .009 .009 .015	Figure 2	Gravity Factor Fa 1.225 1.225 1.225	Dry G	Compre Factor. 1.048 1.051 1.051	Fpv		337 574 980 1446
1 2. 3 4. 5	6.217 6.217 6.217 6.217 6.217	Temp	1.2	1.952 T.134 71.326 77.989 Tr		Pressure Pm 440 460 460 440  Z Ge A. 910 Sp	Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore Flore	Temp.  detor Ft009 .009 .015  descerben of Liquid ty Separate	Retio _ Hydroc or Gas_	Gravity Factor Fg 1,225 1,225 1,225 1,225	Dry G	Compre Factor. 1.048 1.051 1.051 1.051	Fpv		337 574 980 1446
1 2. 3 4. 5	6.217 6.217 6.217 6.217 6.217 6.217	Temp	12 17 .•a 511 511	1.952 7.134 7.326 7.989 T _r		Pressure Pm 44( 46( 44(  2 Ge A. 910 Sp .906 Sp	Flor F  Liquid Hy P.I. Gravity ecilic Gravi	Temp.  Gator Ft009 .009 .009 .015  discarbon of Liquid ty Separato	Ratio Hydroc or Gas	Gravity Factor Fq 1,225 1,225 1,225 1,225	Dry G	Compre Factor, 1.048 1.051 1.051 1.051 as	TPV		337 574 980 1446 —
1 2. 3 4. 5 NO. 1 2. 3.	6.217 6.217 6.217 6.217 6.217 Fr .65 .68	Temp	.•R 511 511 511	1.952 7.134 7.989 Tr 1.37 1.37 1.37		Pressure Pm 440 460 440  2 Ge A. 910 Sp 906 Sp	Flor F  Liquid Hy Li Gravity ecilic Gravi	Temp.  detor Ft009 .009 .009 .015  defocarbon of Liquid ty Separata ty Flowing ure	Retio Hydrocor Gas Fluid,	Gravity Factor Fa 1.225 1.225 1.225 1.225 arbona	Dry G	Compre Factor, 1.048 1.051 1.051 1.051 as	Fpv		337 574 980 1446
1 2. 3 4. 5 NO. 1 2. 3. 4.	6.217 6.217 6.217 6.217 6.217 6.217	Temp	12 17 .•a 511 511	1.952 7.134 7.326 7.989 T _r		Pressure Pm 440 460 440  z Ge A. 910 Sp 906 Cr	Flor F  Liquid Hy P.I. Gravity ecilic Gravi	Temp.  detor Ft009 .009 .009 .015  defocarbon of Liquid ty Separata ty Flowing ure	Retio Hydrocor Gas Fluid,	Gravity Factor Fq 1,225 1,225 1,225 1,225	Dry G	Compre Factor, 1.048 1.051 1.051 1.051 as	TPV		337 574 980 1446 —Mct/bbi. Deq. XXXXXX
1 2. 3 4. 5 NO. 1 2. 3. 4.	6.217 6.217 6.217 6.217 6.217 Fr .65 .68 .68	Temp	12 17 .•a   511   511   505	1.952 7.134 7.989 Tr 1.37 1.37 1.37		Pressure Pm 440 460 440  z Gc A. 910 Sp 906 Cc 905 Cc	Flor F  Liquid Hy Li Gravity ecilic Gravi ecilic Gravi itical Press itical Tempo	w Temp. detor Ft009 .009 .015 discarbon of Liquid ty Separato ty Flowing ure erature	Fluid 6	Gravity Factor Fa 1.225 1.225 1.225 1.225 1.275 1.275	Dry G .660	Compre Factor, 1.048 1.051 1.051 1.051 as	.S.1.A.	× × × .	337 574 980 1446 —Mct/bbl. Deq. XXXXX
1 2. 3 4. 5 NO. 1 2. 3. 4.	6.217 6.217 6.217 6.217 6.217 7 10 6.217 10 6.217 2472	Temp	12 17 .•a   511 511   505	1.952 7.134 7.989 Tr 1.37 1.37 1.37	P. 1	Pressure Pm 440 460 460 440  2 Ge A. 910 906 Sp 906 Ce	Flor F  Liquid Hy Li Gravity ecilic Gravi ecilic Gravi itical Press itical Tempo	w Temp. detor Ft009 .009 .015 discarbon of Liquid ty Separato ty Flowing ure erature	Fluid 6	Gravity Factor Fa 1.225 1.225 1.225 1.225 1.275 1.275	Dry G .660	Compre Factor, 1.048 1.051 1.051 1.051 as	.S.1.A.	× × × .	337 574 980 1446 —Mct/bbl. Deq. XXXXX
1 2. 3 4. 5 NO. 1 2. 3. 4. 5 Pc.	6.217 6.217 6.217 6.217 6.217 7 10 6.217 10 6.217 2472	Temp    Pc 2   Pc 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	12 17 .•a 511 511 505 6110	1.952 7.134 7.989 T _r 1.37 1.37 1.37 1.37 2.35	Pc 2	Pressure Pm 440 460 460 440  Z Ge A. 910 .906 .906 Cr	Flor F  Liquid Hy Li Gravity ecilic Gravi	w Temp. detor Ft009 .009 .015 discarbon of Liquid ty Separato ty Flowing ure erature	Fluid 6	Gravity Factor Fa 1.225 1.225 1.225 1.225 1.275 1.275	Dry G .660	Compre Factor, 1.048 1.051 1.051 1.051 as	.S.1.A.	× × × .	337 574 980 1446 —Mct/bbl. Deq. XXXXX
1 2. 3 4. 5 NO. 1 2. 3. 4. 5 Pc NO.	6.217 6.217 6.217 6.217 6.217 7 1, 6.65 .68 .68	Temp  P.2  22 21	12 17 .•R 511 511 505 6110. 64	1.952 7.134 7.326 7.989 T _r 1.37 1.37 1.37 1.35 7 R.2 5125 4609	Pe ¹ 98	Pressure Pm 440 460 460 440  2	Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Florin	Temp.  deter  Ft.  .009 .009 .009 .015  descerben of Liquid ty Separate ty Flowing ure erature	Fratio _ Hydrocor Gas_ Fluid_ 6 3	Gravity Factor Fa 1.225 1.225 1.225 1.225 1.225 1.225 1.225	Dry G .660 xxx	Compre Factor, 1.048 1.051 1.051 1.051 as	.S.1.A.	× × × .	337 574 980 1446 —Mct/bbl. Deq. XXXXX
1 2. 3 4. 5 NO. 1 2. 3. 4. 5 Pc NO 1 2 3.	6.217 6.217 6.217 6.217 6.217 7 1, 6.65 .68 .68	Temp  Pc 2  22  21  19	12 17 .•R 511 511 511 505 64 47 66	1.952 7.134 7.989 Tr 1.37 1.37 1.37 1.37 2.35 7 8.2 5125 4609 3865	8.1 98 150 224	Pressure Pm 440 460 460 440  2 Ge A. 910 Sp 906 Cr -8.2 (1) 85.7 01.7 45.7	Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Florin	Temp.  deter  Ft.  .009 .009 .009 .015  descerben of Liquid ty Separate ty Flowing ure erature	Fratio _ Hydrocor Gas_ Fluid_ 6 3	Gravity Factor Fa 1.225 1.225 1.225 1.225 1.225 1.225 1.225	Dry G .660 xxx	Compre Factor, 1.048 1.051 1.051 1.051 as	.S.1.A.	× × × .	337 574 980 1446 —Mct/bbl. Deq. XXXXX
1 2. 3 4. 5 NO. 1 2. 3. 4. 5 Pc NO.	6.217 6.217 6.217 6.217 6.217 7 1, 6.65 .68 .68	Temp  P.2  22 21	12 17 .•R 511 511 511 505 64 47 66	1.952 7.134 7.326 7.989 T _r 1.37 1.37 1.37 1.35 7 R.2 5125 4609	8.1 98 150 224	Pressure Pm 440 460 460 440  Z Ge A. 910 .906 .906 Cr	Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Florin	Temp.  deter  Ft.  .009 .009 .009 .015  descerben of Liquid ty Separate ty Flowing ure erature	Fratio _ Hydrocor Gas_ Fluid_ 6 3	Gravity Factor Fa 1.225 1.225 1.225 1.225 1.225 1.225 1.225	Dry G .660 xxx	Compre Factor, 1.048 1.051 1.051 1.051 as	.S.1.A. R	× × × .	337 574 980 1446 —Mct/bbl. Deq. XXXXX
1 2. 3 4. 5 NO. 1 2. 3. 4. 5 Pc, NO 1 2 3. 4. 5	(24 H 6.217 6.217 6.217 6.217 7, .65 .68 .68 .65	P _c ² 22 21 19 16	1.2 1.7 .•R 511 511 505 64 47 66 39	1.952 7.134 7.989 T ₁ 1.37 1.37 1.37 1.35 7 R ₂ 5125 4609 3865 2686	8.1 98 150 224	Pressure Pm 440 460 460 440  2 Ge A. 910 Sp 906 Cr -8.2 (1) 85.7 01.7 45.7	Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Floring Florin	w Temp. deter Ft009 .009 .009 .015 discarbon of Liquid ty Separate ty Flowing ure reture  R ² R ² R ² R ²	Florito Hydrocor Gas Fluid_6 3	Gravity Factor Fa 1.225 1.225 1.225 1.225 1.225 1.225	Dry G .660 xxx	Compre Factor, 1.048 1.051 1.051 1.051 as	.S.1.A. R	X X X .	337 574 980 1446 — Mct/bbl. Deq. (XXXXX
1 2. 3 4. 5 NO. 1 2. 3. 4. 5 Pc, NO 1 2 3. 4. 5	6.217 6.217 6.217 6.217 6.217 7 1, 6.65 .68 .68	Temp  Pc ² Pu  22  21  19  16	1.2 1.7 .•a 511 511 511 505 64 47 66 39	1.952 7.134 1.326 7.989 Tr 1.37 1.37 1.37 1.35 7 2.2 5125 4609 3865 2686	98 150 224 342	Pressure Pm 44( 46( 44(  2 Gc A. 910 .906 .905 Cc -R.² 85.7 01.7 45.7 24.7	Flor Flor F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Com	Temp.  Gator Ft009 .009 .009 .015  drocarbon of Liquid ty Separate ty Flowing ure	Florito Hydrocor Gas Fluid_6 3	Gravity Factor Fa 1.225 1.225 1.225 1.225 1.225 1.225 1.225	Dry G .660 xxx	Compre Factor, 1.048 1.051 1.051 1.051 as	.S.1.A. R	X X X .	337 574 980 1446 —Mct/bbl. Deq. XXXXX
1 2. 3 4. 5 NO. 1 2. 3. 4. 5 Pc. NO 1 2 3. 4. 5 NO.	(24 H 6.217 6.217 6.217 6.217 7, .65 .68 .68 .65	Temp  Pc ² Pu  22  21  19  16	1.2 1.7 .•a 511 511 511 505 64 47 66 39	1.952 7.134 7.989 T ₁ 1.37 1.37 1.37 1.35 7 R ₂ 5125 4609 3865 2686	98 150 224 342	Pressure Pm 44( 46( 44(  2 Gc A. 910 .906 .905 Cc -R.² 85.7 01.7 45.7 24.7	Flor Flor F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Com	Temp.  Gator Ft009 .009 .009 .015  drocarbon of Liquid ty Separate ty Flowing ure	Florito Hydrocor Gas Fluid_6 3	Gravity Factor Fa 1.225 1.225 1.225 1.225 1.225 1.225	Dry G .660 xxx	Compre Factor, 1.048 1.051 1.051 1.051 as	.S.1.A. R	X X X .	337 574 980 1446 — Mct/bbl. Deq. (XXXXX
1 2. 3 4. 5 NO. 1 2. 3. 4. 5 Pc. NO 1 2 3. 4. 5 NO.	(24 H 6.217 6.217 6.217 6.217 7, .65 .68 .68 .65	Temp  Pc ² Pu  22  21  19  16	1.2 1.7 .•a 511 511 511 505 64 47 66 39	1.952 7.134 1.326 7.989 Tr 1.37 1.37 1.37 1.35 7 2.2 5125 4609 3865 2686	98 150 224 342	Pressure Pm 44( 46( 44(  2 Gc A. 910 .906 .905 Cc -R.² 85.7 01.7 45.7 24.7	Flor Flor F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Com	Temp.  deter  Ft009 .009 .009 .015  descarben of Liquid ty Separate ty Flowing ure  Pratture  # 15.025	Florito Hydrocor Gas 1.	Gravity Factor Fa 1.225 1.225 1.225 1.225 1.225 1.225	Dry G .660 xxx	Compre Factor.  1.048 1.051 1.051 1.051 as  (xxP	.S.1.A	X X X X	337 574 980 1446 — Mct/bbl. Deq. (XXXXX
1 2. 3 4. 5 NO. 1 2. 3. 4. 5 Pc NO 1 2 3 4 5 NO. 1 2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	(24 H 6.217 6.217 6.217 6.217 7, .65 .68 .68 .65	Temp  P. 2  22  21  19  16  Well	1.2 1.7 .•a 511 511 511 505 64 47 66 39	1.952 7.134 1.326 7.989 Tr 1.37 1.37 1.37 1.35 7 2.2 5125 4609 3865 2686	98 150 224 342	Pressure Pm 440 460 460 440  2	Flor Flor F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Comparison F  Com	Temp.  Gator Ft009 .009 .009 .015  drocarbon of Liquid ty Separate ty Flowing ure	Florito Hydrocor Gas 1.	Gravity Factor Fa 1.225 1.225 1.225 1.225 1.225 1.225	Dry G .660 xxx	Compre Factor.  1.048 1.051 1.051 1.051 2.051 3.051 3.051 4.051 4.051	.S.1.A. R	X X X X	337 574 980 1446 — Mct/bbl. Deq. (XXXXX



Q MCF/D

### **Laboratory Services**

1331 Tasker Drive Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR:

Mewbourne Oil Co.

Attention: Mr, Greg Milner

P. O. Box 5270

Hobbs, New Mexico 88241

SAMPLE

Chalk Bluff

IDENTIFICATION: Federal #1

COMPANY:

Mewbourne Oil Co.

LEASE: PLANT:

SAMPLE DATA: DATE SAMPLED:

ANALYSIS DATE: 03-18-91

PRESSURE - PSIG

SAMPLE TEMP. °F

460.00 51.00

03-15-91

GAS (XX) SAMPLED BY: LIQUID ( )

ANALYSIS BY:

Gregory Milner Rolland Perry

ATMOS. TEMP. °F

**REMARKS:** 

#### **COMPONENT ANALYSIS**

		MOL		
COMPONENT		PERCENT	GPM	
Oxygen	(02)			
Hydrogen Sulfide	(H2S)			
Nitrogen	(N2)	0.42		
Carbon Dioxide	(CO2)	0.43		
Methan <del>e</del>	(C1)	87.54		
Ethane	(C2)	7.07	1.886	
Propane	(C3)	2.38	0.654	
I-Butane	(IC4)	0.31	0.100	
N-Butane	(NC4)	0.54	0,169	
I-Pentane	(IC5)	0.20	0.071	
N-Pentane	(NC5)	0.14	0.052	
Hexane	(C6)	0.97	0.399	
Heptanes Plus	(C7+)	0.00	0.000	
		100.00	3.331	
BTU/CU.FT DRY	,	1156	MOLECULAR WT	19.0972
AT 14.650 DRY		1153	MOLLOODA!! VV	19.0972
AT 14.650 WET		1133	26# GASOLINE -	0.578
AT 15.025 DRY		1182		0,570
AT 15.025 WET		1162		
SPECIFIC GRAVITY	<b>.</b>			
CALCULATED		0.660		
MEASURED		0.000		

ND PRESSURES (Pc or 11) WORK SHEET FOR CALCULATION OF WEL.

Form C-122F Adopted 9-1-65

FROM KNOWN BOTTOM HOLE PRESSURE (Pt or 15)

3-18-91 % H₂S __ -DATE -.42 Range . % N₂ Tor 374 - 2002 - 43 WELL NO. -8 Township Por 673 L/H 1.000 G .660 LEASE Cholk Bluff GH 6566 Section 6766 DMPANY MENDOUNS X . SCATION: Unit 6466

N.		•	7	თ	4	ល	S	7	œ
-	T _w (W.H. •R)	532	535						
Ν	T _S (B.H. •R)	209	809						
m	$T=(\frac{T_W+T_S}{2})$	870	570						
4	Z (Est.)	008'	062.						
S	TZ	0.754	450.4						
9	GH/TZ	14.399	14,578						
7	e ^S (Table XIV)	716.1	1.727						
63	P _f or ₹€	3249	3249						
on.	P _i ²or 🗲	95501	10556						
9	$P_c 2 = P_f 2/es \text{ or } $	6151.7	6151.7 6110.6						
=	Pc or M	2480.3	2480.3 2472.0	3 G					
12	$p_{\pm}(\frac{P_W + P_S}{2}) \text{ or } (\frac{P_C + P_f}{2})$	2864.6	2860.5						
£	$P_{\rm f} = (P/P_{\rm Cf})$	4.26							
4	$\Gamma_{\rm r} = (T/T_{\rm cr})$	1,52	7.52						
15	Z (Table XI)	061.	.190						

One copy to be filed in District Office (Work copy acceptable)

(EAD PRESSURES (ES or P.,) WORK SHEET FOR CALCULATION OF WE

Form C-1221 Adopted 9-1-65

FROM KNOWN BOTTOM HOLE PRESSURE 185 or P.,

-DATE 3-18-91 - WELL NO. -- LEASE CHOIN BLUFF FEST. COMPANY . Mew bosine

% H₂S -% N2 · 42 -Range 1.00 G .660 %CO2 .43 58 _ Township ___ _ Section _ L/H 6456 H LOCATION: Unit _ 6466

GH 6566 Par 673 Tar 374

L N N		<b>,</b>	2	m	4	ည	ð	7	80
_	T _w (W.H. •R)	532	532	532	532	532	532	532	532
2	T _S (B.H. •R)	809	809	209	809	809	809	209	809
m	$T=(\frac{T_W+T_S}{2})$	570	015	025	220	270	570	570	570
4	Z (Est.)	528'	, 783	. 783	186:	.781	. 780	082.	.792
Ŋ	7.2	2.72	446.5	446.5	445.1	445.2	444.8	444.6	451.7
9	GH/TZ	13.7%	H01.41	14.712	14.753	14.749	14.761	14.768	14.537
7	e ^S (Table XIV)	8671	1.736	1.736	1.739	1.739	1.739	1.240	1.725
æ	費 or Ps	2983	2983	1883	283)	2593	2593	2152	2752
Ø)	<b>要</b> or Ps ²	8898.3	8898.3	8014.6	8014.6	6723.6	6723.6	4631.1	4631.1
õ	$E_{\rm g} = P_{\rm I}^2/e^{\rm S}$ or $P_{\rm w}^2 = P_{\rm s}^2/e^{\rm S}$	87:085	5/26.6	4616.2	4609.0	3867.2	3885.5	2661.7	2684.9
=	<b>数</b> or P _w	2303.1	2264.2	2148.5	2/46.9	1966.5	1.996.1	1631.5	1638.6
52	$P_{11}(\frac{P_W + P_S}{2}) \text{ or } (\frac{P_C + P_I}{2})$	2643.1	7623.6	2489.8	2488.9	2279.8	2279.5	1891.7	1895.3
E.	$P_{\mathbf{r}} = (P/P_{ct})$	3.93	3.90	3.70	3.70	3.39	5.39	2.81	2.82
ă	$T_{\rm F} = (T/T_{\rm cg})$	1.52	7:82	757	1.52	1.52	1.52	1.52	1,52
35	Z (Table XI)	.783	282	181	181'	.780	086.	.792	.792

One copy to be filled in District Office (Work copy acceptable)

COMPANY:

PRO WIRELINE

CLIENT:

MEWBOURNE DIL

GAUGE NUMBER:

12235

WELL NAME:

CHALK BLUFF

WELL NUMBER:

TEST NUMBER:

LOCATION:

TEST OPERATOR:

BURRELL

COMMENTS:

4 POINT FLOW TEST RAN AFTER 72 HOUR BUILD-UP

FOSITION

GAUGE SERIAL NUMBER

1 2

3

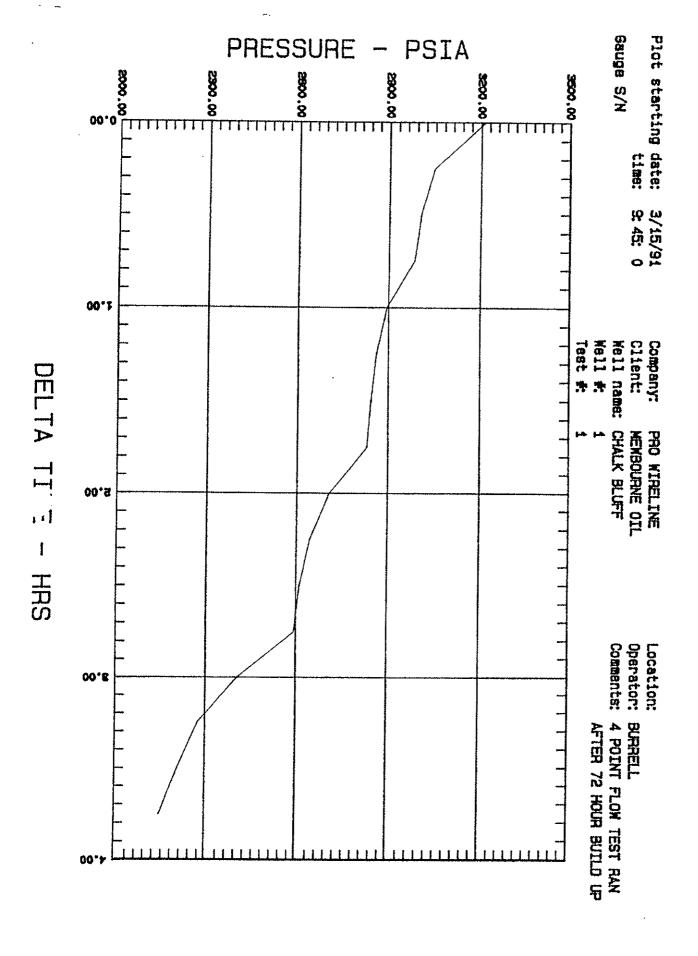
4

AGE START DATE: 3/15/91

GAUGE S/N: 12235

DATA FILE: 3

REAL TIME	DELTA TIME HRS	PRESSURE PSIA	TEMPERATURE 'F	COMMENTS
9:45: 0	0.0000	3213.00	——————————————————————————————————————	ART RATE 1
10: 0: 0	0.2500	3046.00	<b>3</b> 11	mri smie i
10:15: 0	0.5000	3003.00		
10:30: 0	0.7500	2983.00	CT	ADT DATE A
10:45: 0	1.0000	2894.00	511	ART RATE 2
11: 0: 0	1.2500	2861.00		
11:15: 0	1.5000	2843.00		
11:30: 0	1.7500	2831.00	CT	ADT DATE A
11:45: 0	2.0000	2707.00	511	ART RATE 3
12: 0: 0	2.2500	2643.00		
12:15: 0	2.5000	2610.00		
12:30: 0	2.7500	2593.00	י אבר איינ	\
12:45: 0	3.0000	2405.00	211	ART RATE 4
13: O: O	3.2500	2276.00		
13:15: 0	3.5000	2210.00		
13:30: 0	3.7500	2152.00	ENI	OF TEST



Form	3160	4
(Nove	mber	1983
(for	merly	9330

### UNITED STATES COMMESSIONIN DUPLICATE.

Form approved, Budget Bureau No. 1004-0137 Expires August 31, 1985 (Secother In-

		UREAU OF			Marsion		erse side				I. NO.
WELL C	OMPLETION	OR RE	COMPL	ETION	REPORT A	ND LO	G*	G. IV INDIAN,	ALLOTT	EE OR TRIBE	NAME
1a. TYPE OF W		ELAL W	ä. 😧	DRY .	Other			7. I'NIT AGREE	EMENT	NASS	
b. TYPE OF CO		ven 🗀 n	g1,1 puma	0100		lin	<i>//</i> ~				
NEW X	OVER L. F	EEP- PI	re 🗆	DIFF. BESVR.	Other		D	S. FARM OR I.			
2. NAME OF OPE		,			121	120-		1.	Blufi	f Federal	i Com
Mewbouri	ne Oil Co FERATOR	mpany	V	<del></del>	-68M	UL 23	1992	0. wr.t. No.			
P. O. Bo	ож 7698, ^ч	Tyler,	l'exas	75711	0	0. C.	D.	10. FIELD AND	POOL,	OR WILDCAT	
4. LOCATION OF V	VELL (Report local			unce with a	ny State requireme	新作的 在	rechize.			s Camp Mo	
	2250 FW.		FSL					11. SEC., T., R. OR AREA	, и., он	BLOCK AND BU	ELVEY
At total depti	• Same							Sec. 1	-T189	5-R27	
			- 1	ои тиквач .PI #30	0-015-2 657	6 1880'80 75		12. COUNTY OF PARISH Eddy	1	13. STATE	·····
5. DATE SPUUDED	1		DATE COM	u. (Ready l	o prod.) 18. zi	EVATIONS (	DF, RKB,	RT, OB, ETC.)*	19, EL	N.M.	AD.
12/22/90			3/07/9		KB	36251,					
20. TOTAL DEPTH. M 10,120	:	.uo, back f.d., 1 10,079		HOW A	TIPLE COMPL.,	23. ואז	ERVALS LLED BY	IIOTARY TOOLS	<u>.</u>	CABLE TOOL	8
	PERVAL(8), OF THE 9964-6			OM, NAME (	MD AND TVD)*	~ <del>************************************</del>	<del> </del>	······································		WAS DIRECTION	NAL
										Yes	
	AND OTHER LOCH DLL-MSF1							2	7. WAR	NO NELL CORED	
8.		*****		****	ort all strings set	in well)			····		
13-3/8"	WEIGHT, 18.		ACOL		1.8 SIZE			RECORD	[_	AMOUNT PULL	ED
9-5/8"	36#	<del>-</del>	400'		1/2"		<u>- Ci</u>	rc	_	None	
711	26# &	20#	2604 <b>'</b> 9450 <b>'</b>	!	1/4"	1025	<u>- Ci</u>		-	None	
	2011 0	27#	7430		3/4"	1350	<u>- Ci</u>	rc		None	<del></del>
9.		LINER RECO	ORD			30.	· · · · · · · · · · · · · · · · · · ·	TUBING RECOR		***************************************	
8122	TOP (MD)	воттом (мп	) SACKS	CEMENT*	SCREEN (MD)	SIZE	Ī	DEPTH BET (MD)	P	ACKER SET (N	MD)
4-1/2"	9051'	10119		175		2-3	/8"	98051		98051	
. PERFORATION R	econu (Interval, e	ize and numbe		·····		<u> </u>					
	, 9964-67		',				1	TURE, CEMENT			
	PF, Total				9936-67	LE (MD)	·	HOUNT WAD KIND			
. ,	,				9930-07	·	3000	) qals Mod-	101		
							DDT	N2 + 50 ba	LL S	ealers.	<u>Flus</u> l
						·	SCF	bbls 2% K	CILO-W	arcer + 10	000
i.•					t'CTION			TOT IAT	<del>`</del>		,
TR PIRST PRODUC	TION PROD	CCTION METHO			mping—size and	ype of pun	(p)	WELL ST	ATUR (	Producing of	
TE OF TEST			~~~~~~~	Plowing				ahut-i	"' Pr{	oducingn	) 
3/11/91	24 hrs	CHOKE B	784	D'N, FOR T PERIOD	011 <b>BB</b> f	OASNC	ν,	WATER-BEL.		PIL BATIO	
OW, TUBING PRESS.	CASING PRESSU	8/64"	<u>-</u>	<del>-</del>	<u> </u>	886		0		96:1 m	
1600#	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	24-HOUR	RATE		GAS-MCF.	1	WATER~		· .	TY-API (CORR.	)
	DAB (Sold, used for	fuel, vented, c	tc.)	1	886			O [ ]	58		
'Sold											
. LIST OF ATTACH	MENTS						<del></del>	W.	TEN-	FOR RECE	)RD
Logs	)							التكسا			1
. I bereby tertify	that the foregoin	ng attache	Informati	on is compl	ete and correct at	determine	d from	all available reco	rds DD 1	<u>≤3≲</u>  99	†
SIGNED LA	ymos/	my	n	itle E	ngr. Oprns.	Secre	tary	A	PR   3/1	8/91	

Mare 300 Å	101	ictuding depth in	iterval tested, cu	including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and	38.	GEOLOGIC MARKERS	•
9961' 9967' Sandstone Yates 424' 9861' 9881' Sandstone Yates 424' 0uchen 1138' Crayburg 1464' San Andres 1976' Glorietta 3458' Tubb Drinkard 5376' Abo Canyon 8268' Strawn 8844' Morrow Clastics 9770' Barnett 10016'	FORKATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.			
1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989    1989	Lower Mor	9936	12966	Sandstone	NAME	MEAS, DEPTH	TRUE
Queen       1138         Grayburg       1484         San Andres       1976         Glorietta       3458         Tubb       4451         Drinkard       5376         Abo       55794         Molfcamp       55794         Gloso       7666         Canyon       8368         Strawn       8444         Morrow       9454         Morrow       9454         Morrow       9454         Morrow       Barnett       10016	Middle Mortow	11986	. T.886	Sandstone	Yates	4241	
Grayburg   1484   San Andres   1976   Glorietta   3458   Tubb   4451   Drinkard   5376   Abo   5376   Abo   5376   Abo   5376   Abo   5376   Abo   5376   Abo   5376   Aborrow   5454   Morrow Clastics   9770   Barnett   10016	-				Oneen	1138	
San Andres 1976  Glorietta 3458  Tubb 4451  Drinkard 53761  Abo 57941  Wolfcamp 64201  Cisco 76601  Canyon 83681  Strawn 88441  Morrow Clastics 97701  Barnett 100161					Grayburg	1484'	
Glorietta 3458 Tubb 451 Drinkard 5376 Abo 5794 Wolfcamp 6420 Cisco 7666 Canyon 8368 8368 Strawn 8444 Morrow Clastics 9770 Barnett 10016				•	San Andres	19761	
Tubb 4451.  Drinkard 5376.  Abo (520)  Cisco (2anyon 8368.  Strawn 8844.  Morrow 9454.  Morrow Clastics 9770.  Barnett 10016.					Glorietta	34581	
Drinkard 5376' Abo	-				Tubb	4451	
Abo					Drinkard	5376	
Wolfcamp 6420' Cisco 7666' Canyon 8368' Strawn 8844' Morrow Clastics 9770' Barnett 10016'	***************************************	-			Abo	,•	
Canyon 8368' Strawn 8844' Morrow 9454' Morrow Clastics 9770' Barnett 10016'	`.					9 20.	:. ,
Canyon 8368' Strawn 8844' Morrow 9454' Morrow Clastics 9770' Barnett 10016'					Cisco	19992	
Strawn 8844' Morrow 9454' Morrow Clastics 9770' Barnett 10016'	. \$				Canyon		1!,
Morrow Clastics 9770' Barnett 10016'	·	-			Strawn		·
Morrow Clastids 9770' Barnett 10016'					Morrow	<del></del>	
	<u>.</u>				Morrow Clastic	9770 *	
					Barnett	100161	
	•						
						-	
				•		<del></del>	
	<del></del>						
			<del></del>				
					<del></del>		
		***		•		•	
						<del></del>	



### DRILLING CO., INC. - DIL WELL DRILLING CONTRACTORS

505/623-5070 ROSWELL, NM

P. D. BOX 1498 ROSWELL, NEW MEXICO 88202-1498 505/746-2719 ARTESIA, NM

February 05, 1991

Mewbourne Oil Company, Inc.

P.O. Box 5270

Hobbs, N.M. 88241

REF: Chalk Bluff Fed Comm #1

Gentlemen:

The following is a Deviation Survey on the above referenced well located in Eddy County, New Mexico.

400' - 1/4°	4674' - 1 1/4°	6559' - 2 1/2°
905' - 3/4°	5120' - 1 1/2°	6650' - 2 1/4°
1303' - 3/4°	5639' - 1 1/4°	7146' - 1 3/4°
1901' - 1 1/4°	6077' - 3 1/2°	7672' - 3/4°
2399' - 1 3/4°	6126' - 3 3/4°	7800' - 3/4°
2600' - 1 3/4°	6189' - 3 3/4°	8291' - 1°
3098' - 1 1/2°	6250' - 3 3/4°	8815' - 1°
3592' - 1 1/2°	6312' - 3 1/2°	9313' - 3/4°
3682' - 3/4°	6374' - 3 1/4°	9808' - 1 1/4°
4177' - 1°	6467' - 2 3/4°	10,120' 3/4° TD

Sincerely,

Arnold Newkirk Vice-President

STATE OF NEW MEXICO)

COUNTY OF CHAVES

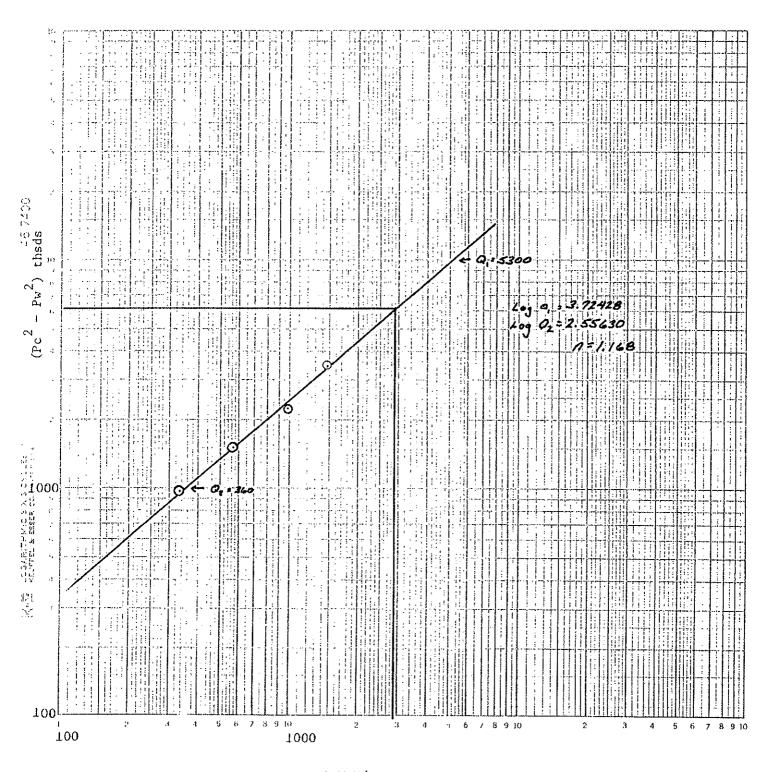
The foregoing was acknowledged before me this 05th day of February 1991 by Arnold Newkirk.

MY COMMISSION EXPIRES

October 07,1992

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL REDEIVED

Y ~	e Test	<del></del>									Test Do						
, , , , , , , , , , , , , , , , , , ,		Initio	al.		] Ai	unual			Spc	cia!	03/1	5/9	L			···	
Con	Lari A				/	Course	ction			13	ěCe.,			HA	γ5	7 45	M '91
	Mewbour	ne Oi	1 Com	pany V				wester	n					Unit C			
Poo	Und	esigr	nated			Lotwa	tion	Managa		M	1Y - 7	199	1	À.	ŘEŽ:		0.55 0.55
	th Illi					1		Morro			Orvar	D.			Lease Na	me	
L	pletion Date			Total Depth				•			TESIA,		E	Oha	lk_Bluf	e to	al canal
	3/05/91	Wi.		<u>10,12</u>	()	Al		Perioratio	075'		10	119		Well No		1 - 7 (-	derar
	172" [	11	6#		1	0,120	י כ	From	9936	To	) 	996	71	1			
The	51/2"	Wi.		d	5et	Ai		Perloratio	U#1					Unit	Sec.	Twp.	Rose ]
2	7/8"	6	5.5			9,80	5'	From	Open	T	<u> </u>	End		County	1	18S	· 27E
Typ	e Well - Stng	e - Dra	denhead	_G.G. or G.C	). Mul	ltiple:			Packer &	61 X1			ĺ	Comity	m 1 1		
	Single	e Cas	}		_T			Temp. *F	Baro Br	980	<u>5'</u>			State	Eddy	<u> </u>	
	fucing Thru		ŧ	ou Temp. *F • 10,12	- 1	Meds Ar	72		1	3.2	'a				ew Mex	ico	İ
	Tbg.		140	I Co		% CO 2		* N 2	J	% H ₂ S		Prov	• <i>t</i>	Meter		Tape	
	<b>L</b> 9949		9949	.660		-	43	1	.42	***		<u> </u>		13.0	68	Fle	٠
	7747 [			OW DATA	<u></u>		1			3111G	DATA		C)	SING	DATA		Duration
	Piover	x	Orifice	Press.	T	Diff,		Temp.	Pres		Tem		Pre		Temp.		ol Flow
ΝО.	Lin# Sir≠		Sire	p.s.1.g.		h _w		•F	p.e.t		• • • • •		p. e.	.9.			72 Hr.
SI	S.T	A			- -				238		-		nı.				1 Hr.
1.	3 X 1.			426.8	- -		-4-1	<u>51</u> 51	217 207		<del> </del>		Pk Pk		·····		1 Hr
2.	$3 \times 1$	125		446.8			11	<u></u>	190			_	Plc				l Hr.
3.	3 x +		······································	446.8 426.8			32 72	<u> 21</u> 45	160				Pk				l Hr.
4.	3 x 1.	1. 4.)		420.0			ا ڪ		1								
5.				<u>. I </u>		RAT	E O	FLOW	CALCU	ATI	ONS			·····			
			1			Pres	4114	Flo	w Temp.		Gravity	•	1	Super	,	late of	Flow
	Coeffic			~\/h_wP_m			m.	F	actor		Factor Fa			mpre##. tor, Fpv		Q, M	:fd
NO.	(24 H	) 			_				Ft.	-			<del> </del>				337
	6.217			41.952 71.134			440 460		.009	┼	1.225			048. <u> </u>			574
2.	6.217						460		.009	1	1.22		1	051			980
3	6.217		-	21.326 77.989			<del>100</del> 440		.015	1	1.22			051			446
<u>4.</u> 5	6,217			1.4.70.2													
		T_		T.		z	Gos	Liquid Hy	drocarbon	fintio		Dry	Gas		•		Mcl/bbl.
NO.	P _t	Tem	p. •R	,t			A.P	.L. Gravity	of Liquid	Hydro	carbon#				<u> </u>		Deg.
1	.65		511	1.37		910	i	cilic Gravi				.66			X.X.	<u> </u>	(XXX
2.	.68	<u> </u>	511	1.37	<u> </u>	906	ļ.	cific Gravi			573	X	<u> </u>	P.S.I	_		. P.S.I.A.
3.	.68		511	1.37		906		ical Press toal Temp			374			F .9.1	R		R
4.	65_	+	505	1.35		905	UIII	ren ramb	C. 4(4)								
5	2472	P. 2	6110	 7				p 2			784		r	P-2	٦,	1.90	57
P _C	P ₁ 2		<u>ي</u>	P, 2	P _C 2 .	- P, 2	(1)	$\frac{P_c^2}{P_c^2 - R_c}$	= .			•	(2) -	B. ² – F	;-		·····
1			264	5125		35.7		16" - R	ý.				L	-c - •w	قد		
2		2.	147	4609	150	)1.7		r	2	٦n	_						
3			966	3865	224	15.7	AOF	-•0	_ ?	,	- 2.1	144		•			
4		1	639	2686	342	24.7		L	F 5	, T							
5	<u> </u>	<u></u>		I			L	······		1	<del></del>		,	10			160
Abs	alute Open i	low	2,	,844				McId	· 15.025	Апа	i• ol 510	pe #	- 4	10	Slop	a, n	1.168
	varks:			o O bbl	£lı	rid di	uri	ng_tesi									
M & U											<del></del>			·····			
				Conduct	{ F1 -	· 			Culcular	ed Bv:			I	Checke	i Dy:		
App	roved by Di	Aterou		1		Miln	^*		1		Lner			B111	Pierce	<b>.</b>	
				1 (7)	. <b></b> )	117 711	cr.		. 0.7.0	سانان رخ							



### **Laboratory Services**

1331 Tasker Drive Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR:

Mewbourne Oil Co.

Attention: Mr, Greg Milner

03-15-91

P. O. Box 5270

Hobbs, New Mexico 88241

SAMPLE

Chalk Bluff

IDENTIFICATION: Federal #1

COMPANY:

Mewbourne Oil Co.

LEASE: PLANT:

SAMPLE DATA: DATE SAMPLED:

ANALYSIS DATE: 03-18-91 460.00

PRESSURE - PSIG

SAMPLE TEMP. °F 51.00

ATMOS. TEMP. °F

GAS (XX)

LIQUID ( )

SAMPLED BY:

Gregory Milner

ANALYSIS BY:

Rolland Perry

**REMARKS:** 

#### COMPONENT ANALYSIS

		MOL		
COMPONENT		PERCENT	GРM	
Охудеп	(02)			
Hydrogen Sulfide	(H2S)			
Nitrogen	(N2)	0.42		
Carbon Dioxide	(CO2)	0.43		
Methane	(C1)	87.54		
Ethane	(C2)	7.07	1.885	
Propane	(C3)	2,38	0.654	
I-Butane	(IC4)	0.31	0.100	
N-Butane	(NC4)	0.54	0.169	
I-Pentane	(IC5)	0.20	0.071	
N-Pentane	(NC5)	0.14	0.052	
Hexane	(C6)	0.97	0.399	
Heptanes Plus	(C7+)	0.00	0.000	
		100.00	3,331	
	_			
BTU/CU.FT DRY		1156	MOLECULAR WT	19.0972
AT 14,650 DRY		1153		
AT 14.650 WET		1133	26# GASOLINE -	0.578
AT 15.025 DRY		1182		
AT 15.025 WET		1162		
SPECIFIC GRAVITY	/_			
CALCULATED		0 550		
MEASURED		0.660		
MICHOUNEL	,	0.000		
			*****	

WORK SHEET FOR CALCULATION OF WELL D PRESSURES (Pcor概)

Form C-122F Adopted 9-1-65

FROM KNOWN BOTTOM HOLE PRESSURE (Pf or理)

3-18-91 -DATE FEET WELL NO. -LEASE Cholk Bluff DMPANY MEWDOOMS OIL

% H₂S _ 17/1/2 .42 Range . -% N2-- 2003 - 43 88 Township ___ L/H 1,000 G 1660 Section 6766 I . SCATION: Unit 6466

GH 6566 Per 673 Ter 374

1 $T_{w}(W.H. \circ R)$ 2 $T_{S}(B.H. \circ R)$ 3 $T^{+}(\frac{T_{w} + T_{S}}{2})$ 4 $Z(Est.)$ 5 $TZ$ 6 $GH/TZ$ 7 $e^{S}(Table XIV)$ 8 $P_{I}$ or $\overrightarrow{F}$ 10 $P_{C}^{2} = P_{I}^{2}/e^{S}$ or $(\frac{P_{C} + P_{I}}{2})$ 11 $P_{C}$ or $\overrightarrow{F}$ 12 $P_{H}(P_{C})$ 13 $P_{I} = (P/P_{CI})$	-							
	•	8	ო	4	ហ	ဖ	7	œ
	532	532						
	209	809						
	870	570						
	008'	062.						
	0.954	450.4						
	14.399	14,578						
		1.727						
	3249	3249						
	95501	105.56						
	6151.7 6110.6	6110.6				·		
	2480.3	2472.0	» رم					
		2860.5						
		4.25						
	1,52	1.52						
15 Z (Table XI)	062"	.190						

One copy to be filed in District Office (Work copy acceptable)

WORK SHEET FOR CALCULATION OF WE. JEAD PRESSURES (#5 or P.,)

Form C-122h Adopted 9-1-65

FROM KNOWN BOTTOM HOLE PRESSURE ( or P.)

-DATE 3-18-91 -% N₂ · 42 Range 1.00 G 1660 % CO2 143 - WELL NO. -__ Township ___ LEASE CHOIK BLUTH _ Section __ 6466 COMPANY . Mew bourne LOCATION: Unit _ 6466

GH 6566 PCT 673 TCT 374

- L'H

% H₂S _

二 三 四		••	2	m	4	ß	9	7	8
-	T _w (W.H. •R)	5.32	532	532	532	532	532	532	532
7	T _S (B.H. °R)	809	809	209	809	809	809	209	809
m	$T=(\frac{Tw+Ts}{2})$	570	015	220	570	570	220	570	570
4	Z (Est.)	.835	, 783	. 783	186.	.781	. 780	082.	.792
s	12	476.0	446.5	146.5	445.1	445.2	444.8	444.6	451.7
9	GH/TZ	13.7%	14.70H	14.712	14.753	14.749	14.761	14.768	14.537
_	e ^S (Table XIV)	817:1	1.736	1.736	1.739	1.739	1.739	1.740	1.725
60	費 or Ps	2983	2983	2831	283)	2593	2593	2152	2752
on.	<b>要</b> or Ps ²	88983	8898.3	8014.6	80146	6723.6	6723.6	4631.1	4631.1
٤	$E_{\phi} = P_{1}^{2}/e^{5} \text{ or } P_{w}^{2} = P_{s}^{2}/e^{5}$	5304.3	5/26.6	4616.2	4609.0	3867.2	3865.5	2661.7	2684.9
=	or Pw	2303.1	2264.2	2148.5	2/4/6.9)	1966.5	1.996.1	1631.5	1638.6
12	$P_{\pm}(\frac{P_W+P_S}{2}) \text{ or } (\frac{P_C+P_f}{2})$	2643.1	7.5292	2489.8	2488.9	2279.8	2279.5	1891.7	1895.3
<u></u>	$P_{\rm f} = (P/P_{\rm cr})$	3.93	3.90	3.70	3.70	3.39	5.39	187	2.82
4	$T_r = (T/T_{cr})$	1.52	1.52	1.52	1.52	75.7	1.52	1.52	1,52
Ť.	Z (Table XI)	,783	.782	181	182'	.780	086.	.792	.792

One copy to be filled in District Office (Work copy acceptable)

COMPANY:

PRO WIRELINE

CLIENT:

MEWBOURNE OIL

GAUGE NUMBER:

12235

WELL NAME:

CHALK BLUFF

WELL NUMBER:

1

TEST NUMBER:

1

LOCATION:

TEST OPERATOR:

BURRELL

COMMENTS:

4 POINT FLOW TEST RAN AFTER 72 HOUR BUILD UP

FOSITION

GAUGE SERIAL NUMBER

1

2

3

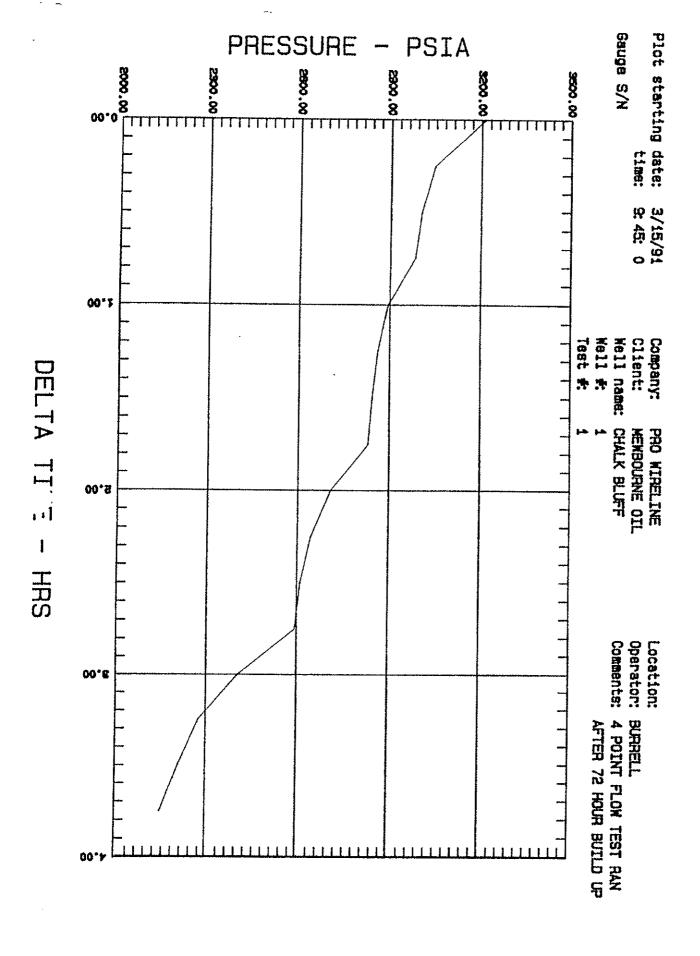
4

AGE START DATE: 3/15/91

GAUGE S/N: 12235

DATA FILE: 3

REAL TIME	DELTA TIME HRS	PRESSURE PSIA	TEMPERATURE *F	COMMENTS
9:45: 0	0.0000	3213.00	CTA	RT RATE 1
10: O: O	0.2500	3046.00	U I FI	A RESERVED.
10:15: 0	0.5000	3003.00		
10:30: 0	0.7500	2983.00	CTAI	RT RATE 2
10:45: 0	1.0000	2894.00	Sim	NI RHIE Z
11: 0: O	1.2500	2861.00		
11:15: 0	1.5000	2843.00		
11:30: 0	1.7500	2831.00	STAI	RT RATE 3
11:45: 0	2.0000	2707.00	D i m	() KMIC A
12: 0: 0	2.2500	2643.00		
12:15: 0	2.5000	2610.00		
12:30: O	2.7500	2593.00	CTA	T DATE 4
12:45: 0	3.0000	2405.00	D I Hr	RT RATE 4
13: 0: 0	3.2500	2276.00		
13:15: 0	3.5000	2210.00		
13:30: 0	3.7500	2152.00	END	OF TEST



#### RECEIVED

**orm 3160-5 ne 1990)

UNITED STATES

FORM APPROVED

	NT OF THE INTERIOR SEP 2 8 1992 LAND MANAGEMENT	Expires: March 31, 1993
	Ö, C. D.	5. Lease Designation and Script No. NM-0557371
SUNDRY NOTICES	AND REPORTS ON WELLS	
Do not use this form for proposals to d	rill or to deepen or reentry to a different reservoir.	d. If Hallen, Atlonee of Tribe Name
Use "APPLICATION FO	OR PERMIT—" for such proposals	
SUBMI	T IN TRIPLICATE	7. If Unit or CA, Agreement Designation
1. Type of Well		
Oil Cas C		
2. Name of Operator		B. Well Name and No.
Mewbourne Oil Company		Chalk Bluff Fed.Com.#1 9. API Well No.
3. Address and Telephone No.		30-015-26575
P. 0. Box 7698, Tyler, Texas	75711 (903) 561–2900	10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey E	Description)	N.Illinois Camp-MorGa
A4101		11. County or Parish, State
2250' FWL & 790' FSL Sec. 1,	T18S-R27E	Eddy
12. CHECK APPROPRIATE BOX	(s) TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
Notice of Intent	Abandonment	
	Recompletion	Change of Plans  New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing
<u></u>	Casing Repair	Water Shut-Off
Final Abandonment Notice	Altering Casing	Conversion to Injection
	Other <u>Additional perfs</u> ,	Dispose Water
13. Describe Proposed or Countered Occasion (City)	acidize & frac	(Note: Repart results of multiple completion on Well Completion or Recompletion Report and Log form t
give subsurface locations and measured and true vertice	If pertinent details, and give pertinent dates, including estimated date of starting cal depths for all markers and zones pertinent to this work.)*	any proposed work. If well is directionally drilled,
	1-9882', 2 SPF, 10' Net, 22 holes.	
8/14/92 - Acidized w/3500 gale 7	17 UCI A additional 1 1000 partition	
sealers. Flushed w/27	12 HCL + additives + 1000 SCF/bbl nitr KCL wtr + 1000 SCF/bbl nitrogen. ISDP	ogen carrying 80 ball
10 mins 3400#, 15 mins	2800#. Avg rate 3.7 BPM, AP 5000#, Mg	4300f, 5 mins 3800f,
to pit 8/15 - 8/18/92.	My rate 3.7 bin, Ar 30007, Mr	. Joods. Blew well down
	tested the to 2000 Held OK. Removed	THE WAY THE
Swabbed well down to 5	300'.	tree. KU BOP. RU swab.
Tested the to 8000# 8	POOH w/tbg & pkr. TIH w/new pkr assem/21/92 - Continued testing tbg. Set pk	bly & 200 jts tbg.
compression. Press annu	ulus to 2000#. Held OK. Started swabbi	r e 9/40.08' w/15 pts
3/22/92 - RU Western Co. Acidiza	d perfs w/1500 gals 7½% HCL acid + add	ng. nad light blow of gas.
nitrogen + 35 ball seal	lers. Flushed w/2Z KCL wtr. ISDP 400#.	itives + 1000 scf/bbl
15 min 3600#. ATP 5100#	, MTP 5400#. RD Western. Opened well	3 min 3/00#, 10 min 3700#
THO SHOW OF RES OF OTT"	Recovering load.	
3/23/92 - RU swab. FL @ 7000'. Sw	vabbed dry in 3 runs. Continued swabbi	no Popovovino II
	James James Market Market	ng. recovering load.
14. I hereby creatly that the turegoing by true and correct		
- Cullow bank	From O	
(Thi) space for Federal or Sixte office use)	Tille Engr. Oprns. Secretary	Date9/11/92
Approved by	Asr	
Conditions of approval, if any:	Title	Date
	<i>I</i> 322	

Tale 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any talse, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form 3160-4 (November 1983) (formerly 9-330)

### UNITED STATES COMMISSIONIN DUPLICATE.

## DEPARTMENT OF WITHE INTERIOR

(Secother Instructions on reverse side)

Form approved.	
Budget Bureau No.	1004-0132
Expires August 31,	

		· · · · · · · · · · · · · · · · · · ·	 	
٠.		DESIGNATION		
	3.72.6	AEE7271		

		BUR	EAU OF LA	ndaran	agëme	-M9210				NM-0!	5573	171
WELL CO	OMPLE	TION	OR RECO	MPLET	ION	REPOR	T AN	ID LO	G*	G. IN INDIAN	I, ALLO	TTEE OR TRESS HAME
IR. TYPE OF WE		OH. WELL	[ GAS		***	Other			<del>-</del>	7. PNIT AGE	EEMEN	r NAMB
b. TYPE OF CO		٧:				V/1001		1120	V.			
WELL X	WORK WORK	EN BEEL-	PLUG BACK	Dir	ien.	Other		acceler.	:D	S. PARM OR		
2. NAME OF OPER		Comp	V			-1	"E//	20		O. WELL NO.		ff Federal Cor
Mewbourn		COMP	any v			fo_	11/11/	123	1997	2 1	7	
P. O. Bo	× 769	8, Ty	ler, Te	xas 75	5711	6		O. C. I	D.		1004 av	L, OR WILDCAT
4. LOCATION OF W	KI.L (Repo	rt location	clearly and in	accordance	e with ar	ny State re	quirem <b>a</b>	PROPERTY OF	REIČ.	170 -1.46		is Camp Morrow
			& 790' i	FSL						11. SEC., T., OR AREA		OR BLUCK AND BURYEY
At top pred. It	aterval rep	orted belov	W							Sec.	1-T1	8S-R27
At total depth	Sam	e		·	·	-						
					ON TIME	)-015-		ISSUED C		12. COUNTY PARISH	OR	13. STATE
DATE SPUBBED	16. DAT	E T.D. REA	CHED   17, DA	1			!			Eddy  B. HT. SB. ETC.)*	1 19 1	N.M.
12/22/90	1/	29/91	3/1	07/91			KB 3	6251,				,
O. TOTAL BEPTH, MO	A TVD			TVD 22	HOW X	TIPLE COM	PL.,	23. INT	ERVAL:	HOTARY TOD	1.8	CABLE TOOLS
10,120 I	20 VA1 / 0 )		.0791	l somman	N.M.S. /	ta D. I. Mar. and III			<del></del>	l X		
9936-46					MANIE (	MU AND TY	.,				25	SURVEY MADE
2230-40	, ,,,,,,,	<del>4</del> -07	- MOLIC	. W								Yes
TYPE ELECTRIC						***************************************				]	27 W	AS WELL CORRO
SDL-DSN,	-ייירת	MSFL,		1807 0 000		and all adul		211				No
CABING BIZE	WEIG	ПТ, LB./FT.				oort all stri N.R BIZE	nge set i		ENTIN	G RECORD	_ī	AMOUNT PULLED
13-3/8"	I	.50#		100'	17-	1/2"		425	- C:	irc		None
9-5/8"	36			504	]	1/4"			- C			None
		# & 29	94	1501	8-	3/4"		<u> 1350 -</u>	<u>- C</u>	irc		None
		Li	NER RECORD		<u> </u>			30.		TUBING RECO	)RD	
8122	TOP (M	D) B	OTTOM (MD)	SACKS CE	MENT*	SCREEN	(MD)	\$12K		DEPTH BET (M		PACKER SET (MD)
4-1/2"	905	<u> L'</u>	0119'	17	5			2-3,	/8"	98051		9805
. PERFORATION RE	CORP (Inte	rval, size	and number)	!		32.	100	In suom	TO A	With the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of t		
9936-46	, 9964	<b>1-</b> 671					INTERVAL			TURE, CEMENT	<del></del>	
13', 2 SI	PF, To	tal 2	18			9936-	-67°					acid + 1000
						-			bbl	N2 + 50 b	all.	sealers. Flus
						ļ			w/3	5 bbls 2%	Keil	water + 1000
•						OUCTION		····		/bbl N2.		<del>2</del> 30
FE FIRST PRODUCT	TON -	PRODUCT	ON METHOD (/			impingsi	re and t	ipe of pun	p)	werr.	STATUS	(Producing of)
TE OF THET	HOURS 7	ESTED	CHOKE BIZE	F'LC	wing	OIL-BBL		OKRAD		WATER—BEL	P	roducing
3/11/91	24 hr:	5	8/64"	TEST F		1	•	886	••	O ··	`   `	886:1 (7)
W. TUBING PRESS,	CABING 1	RESSCEE:	CALCULATED 24-HOUR BAT	011,8	Br	1	MCF.		WATER		<del></del>	AALAA-YAR (CONF.)
1600#	10 10 11 11			1	·····		886			0	58	<u>9</u> .0
Sold	-0 10VIA, N	eca jor jue	o, ventea, elc.)							TEST WITNES	ard by	
LIST OF ATTACH	MENTA		· · · · · · · · · · · · · · · · · · ·			·	<del></del>			W.	- 17/ EAV	FOR RECORD
Logs		**************************************	<b></b>									
I hereby terrify	that the	oregoing	nd attached in	formation	is compl	ete and cor	rrect as	determine	d fron	all avellable re	Cords	SSS   1991
SIGNED MU	porce	DM	mpin	<u></u>	le <u>E</u>	ngr. Op	orns.	Secre	tary	DATE	APR 3/	18/91
' 0	ſ	*(See In	structions an	d Space	fer A	dditional	Data	on Reve	se Si	de) CARI	SBAL	, NEW MEXICO
_										. I (\mathbb{l}) 1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/		

70	indan g	rerval tested, cu		38. GEO	GEOLOGIC MARKERS	•
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.		-	
Lower Morran	9836	12966	Sandstone	NAME	MEAS, DEPTH	TRUE VERT, DEPTH
Middle Morbow	1861	. T886	Sandstone	Yates	4241	
				Queen	1138	
				Grayburg	1484	
				San Andres	19761	
				Glorietta	34581	
			,	Tubb	4451	
-			·	Drinkard	5376"	
				Abo	5794"	
				Wolfcamp		:
			and the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of th	Cisco	19992	. ,.
, 4				Canyon	83681	
				Strawn	88441	, . <b>F</b>
				Morrow	94541	. <i></i> ,
				Morrow Clastids	97701	
				Barnett .	100161	
				,		
W. W. C. C. C. C. C. C. C. C. C. C. C. C. C.						
**************************************					•	
		•	•			

#### State of New Mexico Energy, Minerals and Natural Resources Department

P.O. Box 1980, Hobbs, NM 28240		~~~~~~					at Bot	tom of Page
DISTRICT II P.O. Drawer DD, Artesia, NM 88210			Box 2088		ON			
DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410	1	anta Fe, New M						
I.	REQUEST	OR ALLOWA ANSPORT O					,	
Operator MEWBOURNE OIL COM	,	····			Well	API No.		
Address OIL COM	PANY /				30	-015-2	6575	
P. O. Box 7698, T	yler, Texas	75711						
Reason(s) for Filing (Check proper box)			Oil	her (Please exp	lain)	·		
New Well		n Transporter of:						
Recompletion		Dry Can L						
If change of operator give name and address of previous operator	Casinghead Gas	] Condensate [_]						
II. DESCRIPTION OF WELL	. AND LEASE	·						<del></del>
Lesse Name	Well No.	Pool Name, Includ	ling Formation		Kind	of Lesso		case No.
CHALK BLUFF FEDER	AL 1	North Ill:	inois Car	np Morrov	7 (\$100)	Pederal og P		0557371
Unit Letter N	. 2250	Feet From The	West Lie	790	)F	eet From The	Sout	h Line
Section 1 Townsh	ip 18 South	Range 27	East ,N	мрм,	·	Eddy		County
III. DESIGNATION OF TRAP	VSPORTER OF O	IL AND NATU	RAL GAS					
Name of Authorized Transporter of Oil AMOCO Pipeline Inter- corporate Trucking Name of Authorized Transporter of Casin	G or Conse		Oil Ten	e address to whi iden: Dept	uch approved BOX 70	l copy of this , 2068 Thi	form is to be s	eni) 41.70–2068
Name of Authorized Transporter of Casin	ghead Gas	or Dry Gas 🔯	Address (Giv	e address to wi	ich approve	com of this	form in to be a	****/U-ZUGG
Transwestern Pipeline	Company		P.O.Box	: 1188, н	ouston,	Texas	77251-11	88
If well produces oil or liquids, give location of tanks.	Unit Sec.	18S   27E	is gas actually	y <del>connected?</del> 'es	When	?	n, 1991	
If this production is commingled with that IV. COMPLETION DATA			ling order numl	ber: N	0 '			
Designate Type of Completion	- (X) Oil Well	Gas Well	Now Well	Workover	Deepea	Plug Back	Same Res'v	Diff Res'v
Data Spuddod	Date Compl. Ready to		Total Depth			P.B.T.D.	l	_i
12/22/90	3/07/9			10,120'		1.0,1,0.	10,079	
Elevations (DF, RKB, RT, GR, etc.) KB 3625†, GR 3609† Perforations	Name of Producing Fo		Top Gil/Gas P	9936'		Tubing Dep		
9936-46', 9964-67', 1	13',2 SPF,Tota	al 28				Depth Casin		
the many	TUBING,	CASING AND	CEMENTIN	IG RECORI	)	<u> </u>	w	····
HOLE SIZE 17-1/2"	CASING & TU			DEPTH SET		5	ACKS CEME	NT .
12-1/4"	1.3 <b>-</b> 3,		***************************************	400'			425 /	set ID-2
8-3/3"	7"	· O		2604 <b>9</b> 450 <b>1</b>				-12-91
7"	41/	2" Liner	<del></del>	10119'			1350 Z	MATCH
/. TEST DATA AND REQUES OIL WELL (Test must be after to	T FOR ALLOWA	BLE				·		
Onte First New Oil Run To Tank	covery of total volume of	load oil and must	be equal to or e Producing Met	xceed top allow	able for this	depth or be for	or full 24 hour.	e.)
			T TOOLGOOD SALES	sou (riow, pue		c.)		1
ength of Test	Tubing Pressure		Casing Pressure	8		Choke Size		
Actual Prod. During Test	Oil - Bbls.		Water - Bbis.			Gas- MCF	·-·	
GAS WELL			······································	····	l			
actual Prod. Test - MCF/D	Length of Test		6CL 20.					
886	. 24 hou		Bbls, Condense	ummer 1		Gravity of Co	ndensale B	
Back Pressure	Tubing Pressure (Shut-in		Casing Pressure			Choke Size		
	1600#			·		8,	/64"	
I. OPERATOR CERTIFICA  I hereby certify that the rules and regulati Division have been complied with and the is true and complete to the best of mys. [as.]	one of the Oil Conservat	II	OI	IL CONS	SERVA	TION D	IVISIO	4
De Mont	www.ge and belief.	/	Date A	\pproved		MAY 1	1991	
Signature	where		Po-	OBIGH	NAL SIGI	IED BY		
Gaylon Thompson, Engine	ering Operati	ons	Ву		WILLIAM		<del></del>	
Printed Name	T	ile	Title			DISTRICT	If .	
March 11, 1991 (90	3) 561-2900 Telepho		11110			····		

- INSTRUCTIONS: This form is to be filed in compliance with Rule 1104

  1) Request for allowable for newly drilled or deepened well must be accompanied by tabula Request for anowable for newly drilled on deepened wen must be accompanied by with Rule 111.
   All sections of this form must be filled out for allowable on new and recompleted.
   Fill out only Sections I, II, III, and VI for changes of operator, well name or analy.
   Separate Form C-104 must be filed for each pool in multiply completed wells.



Form 3160-5 (June 1990)

12.

#### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTI

	CONS COUNTS C/S	ř
OI	DD LORN FIGRONED	
25840	Andgelikirini No. 1004-0135	
Arte	5. Lease Designation and Serial No.	
	NM-0557371	
	6. If Indian, Allome or Tribe Name	
reservoir.		
	7. If Unit or CA, Agreement Designation	
	S. Well Name and No.	
	Chalk Bluff Fed. Comm. #	¥1
	9. API Well No.	•
	30-015-26575	
	10. Field and Pool, or Exploratory Area	
	N. Illinois Camp Morrow	
	11. County or Parish, State	
	5.4 6 N. W	
	Eddy Co., N.M.	
CE, REPOR	T, OR OTHER DATA	
OF ACTION		
	Change of Plans	
	New Construction	
	Non-Routine Fracturing	
	Water Saut-Off	
	Conversion to Injection	
·····	Dispose Water (Nose: Report results of multiple completion on Well	
	Completion or Recompletion Report and Log form.)	
nd date of starting	any proposed work. If well is directionally drilled,	
ימומי. כו	rculate hole	
010 . 0	1,001000 11010	
nn # == -		٠
eive		
_ ·		
	<b>√</b>	

Do not use this form for proposals to drill or to deepen or reentry to a different Use "APPLICATION FOR PERMIT-" for such proposals SUBMIT IN TRIPLICATE 1. Type of Well Oil Gas Well Well 2. Name of Operator Mewbourne Oil Company 3. Address and Telephone No. P.O. Box 5270 Hobbs, New Mexico 88241 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 2250' FWL & 790' FSL Sec. 1-T18S-R27E

TYPE TYPE OF SUBMISSION Abandonment Notice of Intent Recompletion Plugging Back Subsequent Report Casing Repair Altering Casing Final Abandonment Notice

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estima give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work

- Spot 8 sx. (50') cement plug on top of existing CIBP @ 7 with plug mud.

- Spot 17 sx. (100') cement plug @ 2650'.
- Spot 17 sx. (100') cement plug @ 450'.
- Cut off and remove wellhead.

- Spot 8 sx. (50') surface plug.

- Install cup and dry hole marker.

- Clean location.

REC

AUG 1 8 1995

OIL CON. DIV. DIST. 2

· 🛪	
<b>~</b> :	77.
	のでは、
5	

14. I hereby cently that the sorteon is true and correct	Tide Engineer	Date 5/25/95
(This prove for Federal or State office use)	PETROLEUM ENGINEER	Date 8/14/95
Approved by Origin Signed by Shannon J. Shaw Conditions of approval, if any		

Fig. 14 U.S.C. Section 1915, mixed it a trime on try person knowledge and willfully in make its any impartment on against of the United States any indice, facilities on fraudulent statements in section to section in the control of the United States and indices on fraudulent statements.

CCB - Artesin

Form 3160-5 (June 1990)

(This space for Federal or State office use)

Approved by (OPHG SAZO) MIS G. LAMA Conditions of approval, if any:

L . FED STATES **DEPARTMENT OF THE INTERIOR**  FORM APPROVED
Budget Bureau No. 1084-0135
Expires: March 31, 1993

	BUREAU OF	LAND MANAGEMENT	Expires, indicit 51, 1893
		S AND REPORTS ON WELLS	5. Lease Designation and Serial No. NM-0557371
Do no	t use this form for proposals to di	rill or to deepen or reentry to a different reservoir.  OR PERMIT-" for such proposals	6. If Indian, Allottee or Tribe Name
	SUBMIT	IN TRIPLICATE	7. If Unit or CA, Agreement Designation
1. Type			
	Oil Gas Well Well X Other		8. Well Name and No.
2. Name	of Operator		Chalk Bluff Federal Comm #1
	bourne Oil Com[any		9. API Well No.
	ss and Telephone No.		30-015-26575
	Sox 5270, Hobbs, NM 505-393-5905 on of Well (Footage, Sec., T., R., M., or Survey De	acciplica)	10. Field and Pool, or Exploratory Area
		scription)	N. Illinois Camp Morrow
790'	FSL & 2250' FWL, Sec.1 T-18S R-27E		11. County or Parish, State
40			Eddy, NM
12.		) TO INDICATE NATURE OF NOTICE, REPORT, C	R OTHER DATA
	TYPE OF SUBMISSION	TYPE OF ACTION	
	Notice of Intent	☐ Abandonment	Change of Plans
		Recompletion	New Construction
	Subsequent Report	Plugging Back	Non-Routine Fracturing
	T resultation of the second	Casing Repair	☐ Water Shut-Off
	Final Abandonment Notice	Altering Casing	Conversion to Injection
		Other Extend T/ A & CIT.	Dispose Water
~~~~			(Note: Report results of multiple completion on Wei) Completion or Recompletion Report and Log form.)
The a a 7" (a CIT	above caption well is currently under T/A CIBP above all perfs @ 7010'. We are co (500 psi) & after passing, extend T/A s question, please call.	sate all pertinet details, and give pertinent dates, including estimated date of ured and true vertical depths for all markders and zones pertinent to this vertical depths for all markders and zones pertinent to this vertical depths. Mewbourne Oil Company would like to extend this possible ring converting this well into a SWD. At this time, Metatus for an additional time.	vork.)"
4. I hereb	by ceptifythat the foregoing is true and correct	тие N.M. Young District Manager	
		THE TANK TOUNG LIBERTOR WIGHTING	Date 10/06/00

Title

Principles of Principality

Date 10/06/00

^{&#}x27;s 18 U.S.C. Section 1001, 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 aments or representations as to any matter within its jurisdiction.

Form 3160-5 (June 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

N.M. C., Cons. Division

811 S. 1st Street

Budget Bureau No. 1004-0135

Expires: March 31, 1993

Artesia, NM 88210-2834tion and Serial No.

Da ==	CUMODY NOTICES	NAME OF THE PARTY	NM-0557371
DO BO	SUNDRY NOTICES A t use this form for proposals to drill Use "APPLICATION FOR	6. If Indian, Allottee or Tribe Name	
			7. If Unit or CA, Agreement Designation
1. Type o	of Well	N TRIPLICATE	
	Oil Gas Well Well X Other		8. Well Name and No.
2. Name of Operator			Chalk Bluff Federal Comm #1
	bourne Oil Com[any		9. API Well No.
	ss and Telephone No. Box 5270, Hobbs, NM 505-393-5905	30-015-26575	
	on of Well (Footage, Sec., T., R., M., or Survey Desc.	rigion	10. Field and Pool, or Exploratory Area
	•	navely .	N. Illinois Camp Morrow
790' (FSL & 2250' FWL, Sec.1 T-18S R-27E		11. County or Parish, State
12.	CHECK APPROPRIATE BOX(s)	TO INDICATE NATURE OF NOTICE, REPORT, C	Eddy, NM
	TYPE OF SUBMISSION	TYPE OF ACTION	
	Notice of Intent	Abandonment	Change of Plans
	;	Recompletion	New Construction
	Subsequent Report	Plugging Back	Non-Routine Fracturing
	(T)	Casing Repair	Water Shut-Off
	Final Abandonment Notice	Attering Casing	Conversion to Injection
		X Other MIT	Dispose Water (Note: Report results of multiple completion on West Completion or Recomplation Report and Log form.)
		ed and true vertical depths for all markders and zones pertinent to this	, on (a)
The a	above caption well was successfully MIT'ed pressure chart is enclosed. v question, please call.	d on 10/25/2000. (500 psi for 30 min.)	OCD - ARTESIA COMPANY

"itle 18 U.S.C. Section 1001, makes it a crime for any person knowingly and wilifully 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.

2250 FWL ENDYLANIM 11M 0557371 Many room Chalk Bluff Fed #1

Form 3160-5 (June 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

A	rtesia, NM 88210 FORM APPROVED	-0135
- 1	Budget Bureau No. 1004-0135	
-	Expires: March 31, 1993	_
		-

NM OIL CONS COMMISSION

Drawer DD

5. Lease Designation and Serial No. NM-0557371

6. If Indian, Allottee or Tribe Name

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE	- •	7. If Unit or CA, Agreement Designation
1. Type of Well Oil Well Well Other	FER 2 1 1994	8. Well Name and No.
2. Name of Operator Mewbourne Oil Company		Chalk Bluff Fed. Com. #1
110. 00% 00%	393-5905	30-015-26575 10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)		N. Illinois Camp 11. County or Parish, State

2: S:	250' FWL & 790' FSL ec. 1-T18S-R27E		Eddy Co., N.M.
12.	CHECK APPROPRIATE BOX(s	TO INDICATE NATURE OF NOTICE, REF	PORT, OR OTHER DATA
	TYPE OF SUBMISSION	TYPE OF ACTION	ON
	Notice of Intent	Abandonment	Change of Plans
	Subsequent Report	Plugging Back	New Construction Non-Routine Fracturing Water Shut-Off
	Final Abandonment Notice	Casing Repair Altering Casing Other Shut-In-Status	Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well

give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled,

Mewbourne Oil Company here by requests temporarily abandon status pending further evaluation of the lease for the above well. The well was spudded 12/22/90.

> APPROVED FOR 12 MONTH PERIOD

I hereby certify that it foregoing is true and correct of Signed	Title .	Petroleum Engineer	Date 01/25/94	_
(This space for Federal or State office use) Approved b (ORIG SCD.) JOE G. LANA Conditions of approval, if any:	Tide .	PETROLEUM ENGINEER	Desc 2/16/94	

Title 18 U.S.C. Section 1001, 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.

		Drawer BD COMMISSION ASK
(June 1990) DEPARTMEN		Artosia NE ESFRAM APPROVED Budgel Bureau No. 1004-0135 Expires: March 31, 1993 5. Lease Designation and Serial No.
DO HOL GOD this form for brobookis to an	AND REPORTS ON WELLS II or to deepen or reentry to a different R PERMIT—" for such proposals	reservoir. NM~0557371 6. If Indian, Allottee or Tribe Name
SUBMIT	IN TRIPLICATE	7. If Unit or CA, Agreement Designation
I. Type of Well Oil Well Well Other	NOV 1 7 1	8. Well Name and No.
2. Name of Operator Mewbourne Oil Company	Q. C. C.	9. API Well No.
3. Address and Telephone No. P.O. Box 5270 Hobbs, New Mex		30-015-26575 10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey De 2250' FWL & 790' FSL of Sec.		N. Illinois Camp 11. County or Parish, State
12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTIC	Eddy Co., N.M. E. REPORT, OR OTHER DATA
TYPE OF SUBMISSION		DF ACTION
Notice of Intent Subsequent Report	Abandonment Recompletion Plugging Back	Change of Plans New Construction Non-Routine Fracturing
Final Abandonment Notice	Casing Repair Altering Casing Other	Water Shut-Off Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well
Describe Proposed or Completed Operations (Clearly state all give subsurface locations and measured and true vertice. * Verbal from Adam Salameh 9/10/93 Abandon Morrow formation 9/11/93 Perforate Cisco from 78.9 9/12/93 Squeeze Cisco from 78.6 9/15/93 Drill out squeeze perfs 9/16/93 Perforate Cisco from 76.9 9/17/93 Abandon Cisco formation 9/18/93 Perforate Wolfcamp 7304 9/19/93 Acidize Wolfcamp w/1500 9/21/93 Set CIBP @ 7294' & perforate Wolfcamp w/2000 9/23/93 Set CIBP @ 7208' & perforate Wolfcamp w/2000 9/24/93 Acidize Wolfcamp w/2000 9/25/93 Set CIBP @ 7010'.	n. Set CIBP @ 9800' & cover w 26'-7830'. Test & evaluate. '-7830' w/600 sx. Class "C". . to 7792'. Squeeze held 2,00 76'-7678'. Test and evaluate. , set CIBP @ 7600' & cover w/3 '-7314'. Test & evaluate. gal. 15% NE-FE from 7304'-731 prate Wolfcamp from 7262'-7278 gal. 15% NE-FE from 7262'-7278	0/35' cement. 00#. 35' cement. 4'. 3'. Test & evaluate. 2'. Test & evaluate.
14. I hereby certify that the foregoing is true and correct Signed 100 100 100 100 100 100 100 100 100 10	Tide Petroleum Engineer	Date 10/05/93
(This space for Federal or State office (stee) Approved by Conditions of approval, if any:	Title ACCEPTED FOR F	

*See InstructionAFIREMAISINEW MEXICO

Mew bourne Oil company Chulk Bluff Feeboral #1 2250 FWL1740' FSL Sec. 1-1186-R27E 7050 EXEPR FOOK' CIBPQ 7394' 2 730 Y CIBPR 7600 W/35 coment 7676 2 7648' 7 830' Squecze w/600 Sx. Test to 2000* < CTBPQ 9800' W/35' Cement 9861' 4" @ 10119"

Collination of the

FORM APPROVED **UNITED STATES** 3160-5 Budget Bureau No. 1004-0135 1990) DEPARTMENT OF THE INTERIOR Expires: March 31, 1993 **BUREAU OF LAND MANAGEMENT** 5. Lease Designation and Serial No. NM-0557371 SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allottee or Tribe Name Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE 1. Type of Well Oil Well X Gas Well 8. Well Name and No. 2. Name of Operator Chalk Bluff Fed. Com. #1 9. API Well No. Mewbourne Oil Company 3. Address and Telephone No. <u>30-015-26575</u> 10. Field and Pool, or Exploratory Area (505) 393-5905 P.O. Box 5270 Hobbs, New Mexico
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 88241 N. Illinois Camp
11. County or Parish, State 2250' FWL & 790' FSL of Sec. 1-T18S-R27E Eddy Co., N.M. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12. TYPE OF ACTION TYPE OF SUBMISSION Notice of Intent Change of Plans Abandonment Recompletion New Construction Subsequent Report Plugging Back Non-Routine Fracturing Casing Repair Water Shut-Off Final Abandonment Notice Conversion to Injection Altering Casing Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) 13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)* 09/08/93 Abandon Morrow Perfs 9861' - 9967' - Set CIBP @ 9800' - cover w/35' cement. - Recomplete in Cisco Formation - Test & evaluate. - If unecomomical recomplete in Wolfcamp - Test & evaluate. 14. I hereby certify th Petroleum Engineer 09/07/93

Title 18 U.S.C. Section 1001, 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.

<u>PETROLEUM ENGINEER</u>

Title

(This space for Federal or Sta

onditions of approval, if any

\pproved by

(ORIG.

he office use)

SGD.) JOE G. LARA

30-015-96575 Oseid-14744 Paopealy-1876 Pool-18890

> 3-19-91 DUAL LAT. 2595-9412 9392-9412 DUAL SPACED NEUTRON LO F-9417 8500-19121

3-19-91

DUAL LAT.

2575-9444

9322-8120

HEUTRON

Long-9417

8500-15121

NC Tops	DEM	5/14/91
Queen		1140
Grayburg		1430
San Andres		1975
5 lorista		3548
Abo		>
wolfcamp		4860
Ponn		
Strown		
Atoka		9435
Morrow		9703

,

•



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Betty Rivera
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

31 January 2003

Navajo Refining Co. P. O. Box 159 Artesia, New Mexico 88211 File Copy

RE: Chalk Bluff Federal Com # 1 N-1-18-27

API 30-015-26575

Violation of Rule 201:

Idle Well

Dear Sirs:

This second directive is to notify you that this well is still in violation of Rule 201.

On 12 December, 2002 a letter was sent notifying you on the violation of Rule 201. On 3 January, 2003 the form C-104 was faxed to you indicating Navajo Refining was the operator of this well. To date no action has been taken.

Rule 201 of the New Mexico Oil Conservation Division provides as follows:

201 WELLS TO BE PROPERLY ABANDONED

201.A. The operator of any well drilled for oil, gas or injection; for seismic, core or other exploration, or for a service well, whether cased or uncased, shall be responsible for the plugging thereof. [7-12-90...2-1-96] 201.B. A well shall be either properly plugged and abandoned or temporarily abandoned in accordance with these rules within ninety (90) days after:

- (1) A sixty (60) day period following suspension of drilling operations, or
- (2) A determination that a well is no longer usable for beneficial purposes, or
- (3) A period of one (1) year in which a well has been continuously inactive.

[7-12-90...2-1-96]

In the event that a satisfactory response is not received to this letter of direction by 15 March, 2003, further enforcement will occur. Such enforcement may include this office applying to the Division for an order summoning you to a hearing before a Division Examiner in Santa Fe to show cause why you should not be ordered to permanently plug and abandon this well. Such a hearing may result in imposition of CIVIL PENALTIES for your violation of OCD rules.

Sincerely

•		
Van Bart	on	
Field Ren	r II	

Shirley Jones - crude oil supply clerk LEASE RECORDS

> Navajo Refining Company P.O. Box 159

Artesia, NM 88211-0159 phone (505) 746-5325 fax (505) 746-5283

shirleyi@navalo-refining.com (please note the "j" after shirley)

TO:

District II

COMPANY:

Oil Conservation Division

FAX:

505-748-9720

PHONE:

505-748-1283

RE.

Chalk Bluff Federal Com #1

API No. 30-015-26575

MESSAGE:

We have received the enclosed letter from you showing that Navajo Refining Company is the operator for the above referenced lease.

Navajo Refining Company is neither the operator, transporter or purchaser on this lease. Your Internet site shows Mewbourne Oil Company to be the operator.

We do have them as an operator on some of the leases that we transport. But this lease is not one of them.

We have contact information for them of: PO Box 7698, Tyler, TX 75711, with a New Mexico phone for Jerry Elgin of 505-393-5905.

If you have other information that shows Navajo Refining Company as the operator, would you please forward a copy to me so that I may research it further.

Thank you.

Thereby fores

Shirley - Please note the attached document Signed by Darrell Moore.

District I

1625 N. French Dr., Hobbs, NM 88240

ict II

Jouth First. Artesia, NM 88210

District III

1000 Rio Brazos Road, Aztec, NM 87410

District IV

2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-104A August 11, 2000

Oil Conservation Division 2040 South Pacheco Santa Fe, NM 87505 Sub the impy of the final affected wells that he with 2 copies of this form per number of wells on that list to appropriate District Office

Change of Operator

Previous Operator Information:	New Operates Information:
OGRID: 14744 Name: Mewbourne Oil Company Address: P. O. Box 7698 Address: City, State, Zip: Tyler, TX 75711	New Ogrid: 156 4 New Name: Navaj Refining Company Address: Address: Address: P.O. B. 59 City, State, Zip: Dallac, PX 75201 Artesia, NM 88211
I hereby certify that the rules of the Oil Conservation Division form and the attached list of wells is true and complete to the bear New Operator Signature: Printed name: Title: Env. Mgr. for Water Date: 12/5/00 Phone: Sos - 748	and Waste
Previous operator complete below:	NMOCD Approval
Previous	Signature: Lim W. Seems
Operator: Mewbourne Oil Company Previous	Printed
OGRID: 14744	Name: 2 +
Signature: Morty Whiteore Printed Name:	District: NOV Z 7 2000 Date:
27021- property code	- Whalk Bluff Federal Com #1

27021- property code - What Oly flatal (00. 30-015-26575-API Humber 1-185-27€

			Oil O	
Form 3160-5 (September 2001)	UNITED STATE DEPARTMENT OF THE I BUREAU OF LAND MANA	NTERIOR 1301	Oil Cons. .M. DIV-Dist. W. Grand Av	Expires: January 31, 2004
SIND	BUREAU OF LAND MANA RY NOTICES AND REPO his form for proposals to	PIS ON WEIGH	esia, NM 882	150 Lease Serial No.
Do not use to abandoned v	his form for proposals to rell. Use Form 3160-3 (APE	drill or to re-enter) for such propose	an Is.	6. If Indian, Allottee or Tribe Name
				7. If Unit or CA/Agreement, Name and/or No.
1. Type of Well			2345870	
	Other TEMPORARILY AE	ANDONED	23.00	8. Well Name and No.
2. Name of Operator NAVAJO REFINING COMPA	NY 15694	15	k 3	WDW-3 #3 23592 9. API Well No.
3a. Address	13077	3b. Phone Non (includ	e ared bare)	30-015-26575
PO BOX 159, ARTESIA, NM	89211	505-748-3319	WE CIVED CIA	10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec			HECK HIES	NAVAJO INJECTION; PERMO-PENN
		\3	000 1	/ 11. County or Parish, State
790 FSL, 2250 FWL, 1-18S-2	7E	L'age.		
10.0770.075.4		7.22	\$2217.00 Z	EDDY
	PROPRIATE BOX(ES) TO			PORT, OR OTHER DATA
TYPE OF SUBMISSION		TY	PE OF ACTION	100
[7] N. J. W. J.	Acidize	Deepen	Production (Start)	Resume) Water Shut-Off
M Notice of Intent	Alter Casing	Fracture Treat	Reclamation	Well Integrity
Subsequent Report	Casing Repair	New Construction	Recomplete	Other RECOMPLETE AS
Final Abandonment Notice	Change Plans	Plug and Abandon	Temporarily Aba	ndon CLASS I INJECTION
Links Aparduoishent Morice	Convert to Injection	Plug Back	Water Disposal	WELL
If the proposal is to deepen dire Attach the Bond under which the	ctionally or recomplete horizontally ne work will be performed or prov olved operations. If the operation r all Abandonment Notices shall be	give subsurface location ide the Bond No. on file esults in a multiple comp filed only after all require	ns and measured and true with BLM/BIA. Required detion or recompletion in ements, including reclam	y proposed work and approximate duration thereo vertical depths of all pertinent markers and zones. It subsequent reports shall be filed within 30 days a new interval, a Form 3160-4 shall be filed once ation, have been completed, and the operator has the filed when the filed once ation.
Original well name was CHALK	**			SUBJECT TO LIKE APPROVAL
DRILL OUT BRIDGE PLUG AT INJECTION-TEST PERFORAT	IONS AT 7050' - 7102', 7262' -	7278' TO PLAN SQU	EEZE-CEMENT JOB.	BY NMOCD
DRILL OUT BRIDGE PLUGS A SQUEEZE-CEMENT PERFORA	AT 7208' AND 7294', CLEAN (ATIONS AT 7050', 7100', 7260	OUT HOLE THROUG	H PERFS AT 7304'-7:	314'.
DRILL OUT BRIDGE PLUG AT				APPROVED
RUN CBL/VDL AND CALIPER		•		AFFICOVED
PERFORATE 8540' - 8620' AND RUN INJECTIVITY TEST, AND				
RUN INJECTION/FALLOFF TE		· .	:	SEP 2 9 2003
RUN DIFFERENTIAL TEMPER				
RUN RADIOACTIVE TRACER INSTALL INJECTION TUBING		76001		LES BABYAK
INSTALL WELL ANNULUS M	ONITORING EQUIPMENT, A	ND PREPARE WELL	FOR INJECTION.	PETROLEUM ENGINEER
14. I hereby certify that the foregoing	z is true and correct			
Name (PrintedlTyped)			/ دو	
- Darrell N	pore	Title	IN. Mar. Y	or Waters Unite
. 7.		······································		
Signature Haul	More		7/17/03	
Signature Haul	More			

ons of approval, if any, are attached. Approval of this notice does not warrant or that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. 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 sames any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Averaged for record NMOCD

(Printed/Typed)

Office

Title

Date

Approved by (Signature)

District I

1625 N. French Dr., Hobbs, NM 88240 District II

301 W. Grand Avenue, Artesia, NM 88210 rict III

...00 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

Form C-102

Revised June 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION	AND ACREAGE DI	EDICATION PLAT
² Pool Code		3 Paul Name

API Number	² Pool Code	Pool Name	
30 - 015 -26575		Navajo Injection; Per	rmo-Penn
Property Code	³ Pı	roperty Name	Well Number
23592		WDW	3
OGRID No.		perator Name	'Elevation
15694	Navajo Re	efining Company	3609' GL;
13614			. 3625' KB

10 Surface Location

UL or lot no. N	Section 1	Township 18S	Range 27E	Lot Idn	Feet from the 790	North/South line South	Feet from the 2250	East/West line West	County Eddy
			11 Botte	om Hole	Location If I	Different From	Surface	······································	
JL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County

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

	NON-STA	NDARD UNIT HAS BE	<u>EN APPROVED BY T</u>	HE DIVISION
1				17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.
			345678970	Signature Daniel Mosel Prisond Name Darrell Mosre
		764 73 73 73	RECEIVED ARTESIA 34 OCO ARTESIA 37	Title and B-mail Address Env. Mar. For Watera Waste Date Classell@navajo-retining.
				9/17/02
				18 SURVEYOR CERTIFICATION 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.
2250 —	*			Date of Survey Signature and Seal of Professional Surveyor:
	790			Certificase Number

REENTRY PROCEDURE

NAVAJO REFINING COMPANY'S WDW-3 (PROPOSED)

790'FSL and 2250' FWL, Section 1, T18S, R27E Eddy County, New Mexico Chalk Bluff Federal Com. No. 1, API No. 30-015-26575

All depths are in feet below well's original kelly bushing height (RKB) of 16 feet above ground level. The original KB elevation is 3625 feet above mean sea level. The ground level elevation is 3609 feet above mean sea level.

Tops of Geologic Formations (from RKB)

The base of the lowermost USDW is at 420 feet.

San Andres	1976 feet	Lower Wolfcamp	7303 feet
Yeso	4030 feet	Cisco	7650 feet
Abo	5380 feet	Canyon	8390 feet
Wolfcamp	6745 feet	Strawn	8894 feet

Depth of Plugs

7010 feet in 7-inch casing above perforations 7050 feet to 7102 feet 7208 feet in 7-inch casing above perforations 7262 feet to 7278 feet 7294 feet in 7-inch casing above perforations 7304 feet to 7314 feet 7600 feet in 7-inch casing above perforations 7676 feet to 7678 and 7826 feet to 7830 feet

9800 feet in 4-1/2-inch liner above perforations 9861 feet to 9967 feet

Anticipated Formation Pressure

The expected bottom-hole pressure is 3448 pounds per square inch absolute (psia) at 9000 feet, for a gradient of 0.383 pounds per square inch (psi) per foot, or an equivalent

mud weight of 7.36 pounds per gallon (ppg). The bottom-hole pressure was determined from the pressure measured in Navajo's WDW-2, or 2813 psia, at 7570 feet. Navajo's WDW-2 is completed in the same interval proposed for WDW-3 and is located in 12-T18S-R27E, 3200 feet southwest of proposed WDW-3. The average specific gravity of the fluid in the Cisco and Canyon Formations is expected to be 1.025, which is the specific gravity of the fluid swabbed from WDW-2 in June 1999 from the interval between 7826 feet and 8399 feet. The expected bottom-hole pressure at 9000 feet in proposed WDW-3 is calculated below:

BHP (9000 feet) =
$$2813 \text{ psia} + (9000 \text{ feet} - 7570 \text{ feet}) \times 0.433 \text{ psi/ft} \times 1.025$$

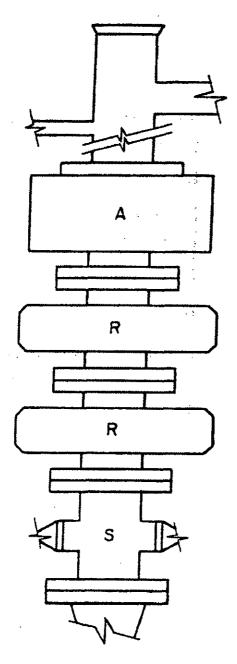
= 3448 psia

Reentry Procedure

- 1. Level location to accommodate a workover rig, pump, tanks, and ancillary equipment. Build a small working pit approximately 30 feet square and 3 feet deep with a plastic lining. Move in the rig, tank, shale shaker, and work string.
- 2. Install a 7-1/16-inch, 3000-psi double hydraulic blowout preventer (BOP) and a 7-1/16-inch, 3000-psi annular BOP (see Exhibit A for schematic). Pressure test the BOP stack and casing to 1500 psi for 30 minutes. Pick up a 6-1/8-inch bit, and sufficient 4-3/4-inch drill collars to drill out the cement plugs, on a 2-7/8-inch work string. Mix a tank of 8.5-ppg sodium chloride brine water for circulating fluid.
- 3. Run the bit to 7000 feet and circulate the wellbore fluid out of the casing into a frac tank for disposal. Drill out the cast iron bridge plug (CIBP), cement at 7010 feet, and clean out to the CIBP at 7208 feet. Circulate the hole clean and pump into the perforations from 7050 feet to 7102 feet to establish a rate and pressure for a pending squeeze cement job.
- 4. Drill out the CIBP at 7208 feet and clean out past the perforations from 7262 feet to 7278 feet and drill out the third CIBP at 7294 feet. Clean out below the perforations from 7304 feet to 7314 feet. Run a second injection test for injection rate and pressure comparison.

- 5. Pull the bit and run a retrievable squeeze packer on the work string. Set the packer at 7150 feet and test for communication between the perforations. Squeeze the perforations from 7262 feet to 7278 feet and 7304 feet to 7314 feet with approximately 100 sacks of neat cement (actual squeeze cement volume to be determined by the injection rate established previously), attempting to reach 1500 psi to 2000 psi squeeze pressure. Release the packer and reverse out any excess cement, then re-test the perforations to the squeeze pressure.
- 6. Re-set the packer at 6900 feet and squeeze the perforations from 7050 feet to 7102 feet as before.
- 7. Lay down the squeeze packer and drill out the cement to the CIBP at 7600 feet. Conduct a pressure test to 500 psi for 12 hours to confirm the squeeze cement will contain the annular fluid pressure required during injection operations.
- 8. Drill out the CIBP at 7600 feet and circulate to the top of the liner at 9051 feet. Circulate the casing clean with 8.5-ppg brine water. Pull the bit and lay down the drill collars.
- 9. Run a cement bond log with variable density (CBL/VDL) from the liner top to the surface, followed by a baseline multi-finger caliper log from the liner top to the surface.
- 10. Perforate the intervals 8540 feet to 8620 feet and 7660 feet to 8450 feet with 2 JSPF, using hollow steel carrier perforating guns.
- 11. Run the work string and retrievable packer to 7600 feet. Swab, or backflow, the perforated interval to recover a representative sample of the formation water for laboratory analysis. Monitor the recovered fluid for hydrogen sulfide.
- 12. Conduct a short injectivity test with 8.5-ppg brine water to determine the need for stimulation. If required, stimulate the perforations with acid (type and amount to be determined from injectivity results), followed by 500 barrels of 8.5-ppg brine water.

- 13. Pull the work string and lay it down. Run a surface readout pressure gauge, with memory backup, to 7600 feet. Conduct an injection test down the casing at 420 gallons per minute for 12 hours (7200 barrels). Shut the well in and record the pressure falloff for a minimum of 12 hours.
- 14. Pull the gauges and run a differential temperature survey from surface to 9100 feet. Run a radioactive tracer survey to demonstrate mechanical integrity.
- 15. Run a tubing conveyed injection packer on 4-1/2-inch, 11.60 lb/ft, K-55, LT&C, 8rd injection tubing. Set the packer at approximately 7600 feet. Fill the annular space with 8.5-ppg brine water containing oxygen scavenger and corrosion inhibitor. Land the injection tubing in the wellhead and install the upper section.
- 16. Pressure test the annulus as required by New Mexico regulations.
- 17. Install well annulus monitoring equipment and prepare the well for injection.



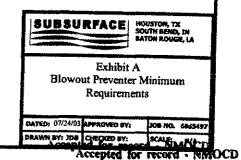
A = ANNULAR BLOWOUT PREVENTER 7-1/16", 3000 psi working pressure

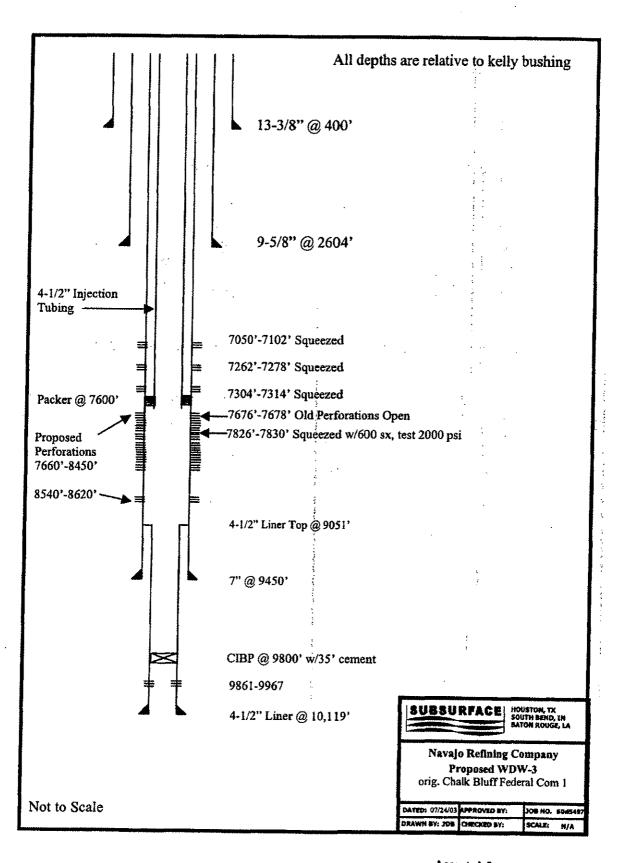
R = RAM TYPE BLOWOUT PREVENTER 7-1/16", 3000 psi working pressure

S = DRILLING SPOOL WITH SIDE OUTLETS 7-1/16", 3000 psi working pressure

Manual Choke Manifold 2", 3000 psi working pressure

Source: API RP 53, Recommended Practices for Blowout Prevention EquipmentSystems





SURFACE USE PLAN

NAVAJO REFINING COMPANY PROPOSED WDW-3 790' FSL, 2250' FWL, 1-T 18S-R27E EDDY COUNTY, NEW MEXICO

- 1. Existing Roads: Existing roads that lead to the proposed drillsite are shown on Exhibit A.
- 2. Access Roads To Be Constructed: No new access road is proposed.
- 3. <u>Location of Existing Wells</u>: Existing wells within one mile of proposed WDW-3 are shown on Exhibit B.
- 4. <u>Location of Proposed Facilities If Well Is Completed</u>: The well will be shut in after completion and testing.
- 5. <u>Location and Type of Water Supply</u>: Water for reentry, testing, and completion operations will be purchased from a commercial water hauler.
- 6. Source of Construction Materials: No construction materials will be required.
- 7. Methods of Handling Waste Disposal:
 - A. Drill cuttings will be disposed of in the drilling pits.
 - B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
 - C. Water produced during tests will be disposed of in the drilling pits.
 - D. Trash, waste paper, garbage, and junk will be buried in a trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind.
 - E. All trash and debris will be buried or removed from the wellsite after finishing drilling and/or completion operations.

8. Ancillary Facilities: None anticipated.

9. Wellsite Layout:

- A. The existing well pad will be leveled to accommodate a workover rig, pump, tanks, and ancillary equipment.
- B. Existing topsoil to a depth of 6 inches will be lifted and stockpiled at the uphill end of the well pad. The stockpiled topsoil will be located uphill to avoid mixing with subsurface materials.
- C. The well pad will be surfaced with material found in place.
- D. A small working pit will be constructed to hold drilling fluids and cuttings. The approximate dimensions of the pit will be 30 feet x 30 feet x 3 feet.
- E. The working pit for drilling fluids and cuttings will be lined with 6-mil plastic.

10. Plans for Restoration of Surface:

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. After abandonment, all equipment, trash, and junk will be removed and the location cleaned.
- D. The stockpiled topsoil will be spread over the surface of the location.
- 11. Surface Ownership: U.S. Department of Interior, Bureau of Land Management.
- 12. <u>Archaeological Survey</u>: Navajo Refining Company is conducting an archeological survey. The report of the survey will be submitted by Navajo under separate cover.
- 13. Operator's Representatives: Representatives responsible for assuring compliance with the approved Surface Use Plan:

Mr. Darrell Moore Navajo Refining Company Post Office Box 159 Artesia, New Mexico 88211 505/748-3311 Mr. Jim Bundy Subsurface Technology, Inc. 7020 Portwest Drive, Suite 100 Houston, Texas 77024 713/880-4640

Exhibits

- A. Topographic Map
- B. Oil and Gas Map

14. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions that exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Navajo Refining Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date

Date

Signature

Darrell Moore

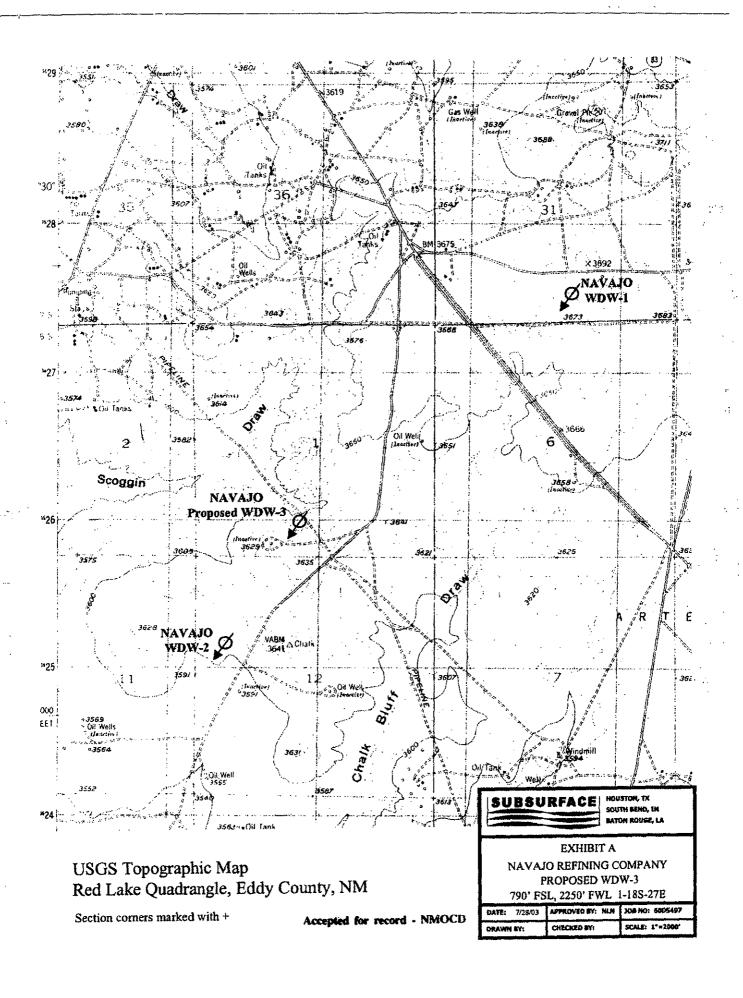
Name

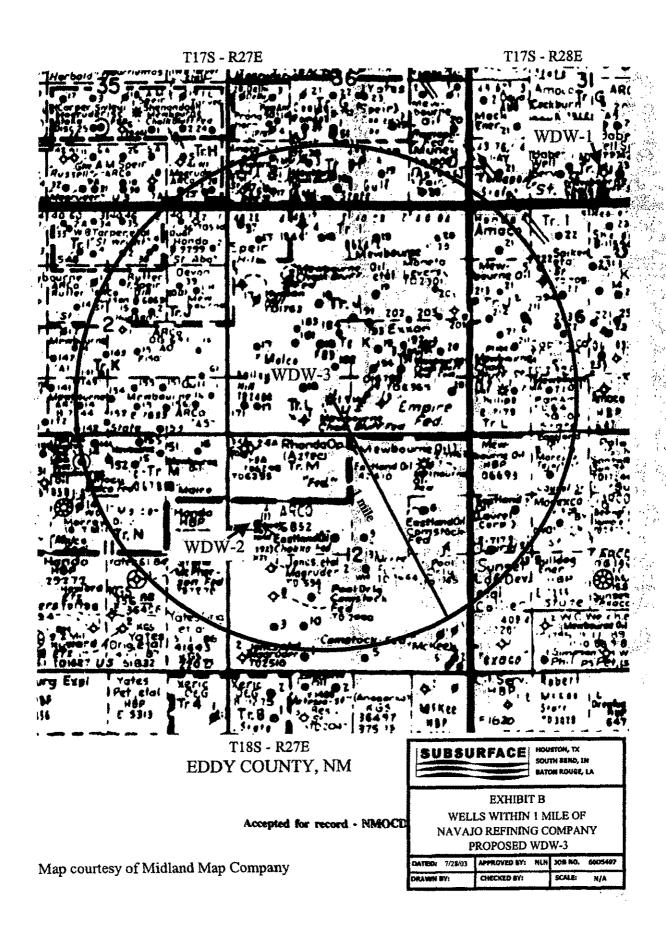
Eau. Mgr. for Water- Waste

Title

Navajo Refining Company

Company





Form 3160-5 (February 2005) OCD-ARTESIA

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires: March 31, 2007

5. Lease Serial No.

SUNDRY	NOTICES AND REP	PORTS C	N WE	LLS		NM-0557371			
Do not use ti abandoned w	his form for proposals to rell. Use Form 3160 - 3 (A	o drill or APD) for s	to re- uch pr	enter an oposals.	,	6. If Indian	i, Allonee or	Tribe Name	
	IPLICATE- Other instr	uctions o	n reve	rse side	•	7. If Unit o	CA/Agreer	nent, Name an	Vor No.
1. Type of Well Oil Well	Gas Well					8. Well Na	ma nad No		······································
2. Name of Operator NAVAJO R	CYCYNIBALO CODEN A DIV					WDW-			
3a Address	EFINING COMPANY	7h DhanaN	la (%). J			9. API Wa 30-015		•	
P.O. BOX 159, ARTESIA, NM	1 8821	3b. Phone N 505-746	RECE	hAmilia)				xploratory Are:	3
4. Location of Well (Footage, Sec.,	T., R., M., or Survey Description)		JUL 1	7 2006		NAVA.	JO INJEC	TION; PERN	10-PEN
790' FSL, 2250' FWL, 1-18S -	27 E	Q		ritho!	M	11. County EDDY,		late	
12. CHECK A	PPROPRIATE BOX(ES) TO	INDICATE	NATUR	E OF NO	OTICE, R	EPORT, OF	OTHER	DATA	
TYPE OF SUBMISSION				PE OF AC					
Notice of Intent Subsequent Report Final Abandonment Notice	Acidize Alter Casing Casing Repair Change Plans Convert to Injection	Deepen Fracture T New Cons Plug and A Plug Back	struction Abandon	Reco	uction (Sta amation amplete porarily Ab er Disposal	,	Well I	Shut-Off ntegrity RECOMPL CLASS 1 INJECTION	
WELL WILL BE PLUGG DRILL OUT BRIDGE PL INJECTION-TEST PERF DRILL OUT BRIDGE PL	E WAS CHALK BLUFF FEDI GED BACK AND COMPLETE .UG AT 7010' AND CLEAN O FORATIONS AT 7050'-7102', 7 .UGS AT 7208' AND 7294'. CI	:D-AS A CLA UT TO 7208 7262'-7278' T LEAN OUT)	ass I inj '; 'o plan Hole t	SQUEEZ HROUGH	E CEMEN PERFS A	IT JOB:			
DRILL OUT BRIDGE PL RUN CBL/VDL AND CAI PERFORATE 8540'-8620' RUN INJECTIVITY TES RUN INJECTION/FALL(T, AND ACIDIZE IF NECESS OFF TEST; EMPERATURE SURVEY;	UT TO TOP FACE;	, AND 73 OF LIN	04'-7314'; ER AT 905	51';	AC	CEPTI	ED FOR	
INSTALL INJECTION TO INSTALL WELL ANNUL	UBING AND PACKER TO AI US MONITORING EQUIPM	PPROX. 7600 ENT, AND P	repar	E FOR WI	ELL INJE	CTION.		ES BARYA	
 14. I hereby certify that the foreprinted (Printed/Typed) 	going is true and correct							LEUM EN	
DARRELL MOO	DRE		Title E	NVIRONM	iental n	ANAGER I	FOR WAT	ER & WAST	E
Signature David	ll Moore		Date	6/2	7/06				
	THIS SPACE FOR F	EDERAL	OR S	TATE O	FFICE	USE			·
A repressed by							e 10001	d	
Approved by Conditions of approval, if any, are a certify that the applicant holds legal which would entitle the applicant to	or equitable title to those rights in	oes not warran the subject lea	t or	tle Tice	ACC	pated to	SO/F		
Fitle 18 U.S.C. Section 1001 and Title		crime for any	nerson kn	wingly and	l willfully to	make to en	denortment	or or of t	ha United

11tle 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.

Navajo-Artesia WDW #3 EPA Annulus MIT and Tracer Test [API# 30-015-26575] (Carl Chavez & Leonard Lowe- OCD) November 15, 2006

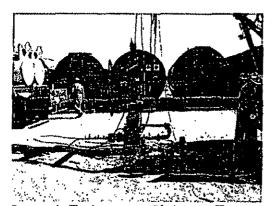
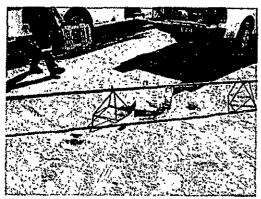


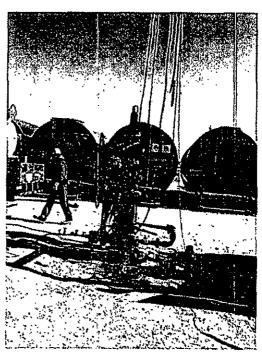
Image 1: Facing west. Christmas Tree with 500-barrel tanks in background. Far left tank was the only tank providing salt water. Truck on left is the pump truck pumping brine water only. Right truck is the rig truck (Wood Group Logging Service).



<u>Image 2</u>: Radioactive tool set up. Tracer, Iodine 131 (half-life ~ 8 days).



<u>Image 3</u>: Rig truck with view of data logger compartment (Wood Group Logging Services).



<u>Image 4</u>: Petroplex workers prepping wellhead for wire line tool entry.

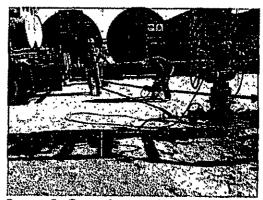


Image 5: Petroplex employees laying pipe from pump truck to well head.

Navajo-Artesia WDW #3 EPA Annulus MIT and Tracer Test [API# 30-015-26575] (Carl Chavez & Leonard Lowe- OCD)

November 15, 2006

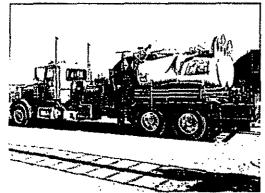


Image 6: Pump truck, Petroplex, for Brine water pumping only. No HCL used throughout process.



<u>Image 7</u>: Securing of the wire line to the wellhead.

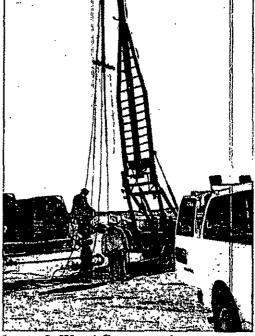


Image 8: Wood Group employee securing wellhead for tool entry.

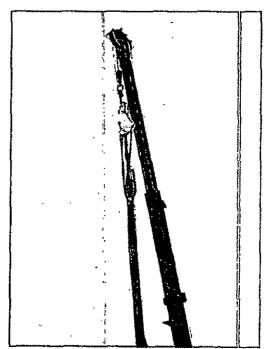


Image 9: Configuration at the top end of the boom.

Navajo-Artesia WDW #3 EPA Annulus MIT and Tracer Test [API# 30-015-26575] (Carl Chavez & Leonard Lowe- OCD)

November 15, 2006



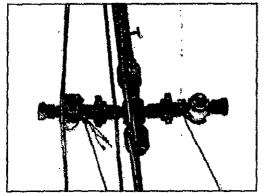
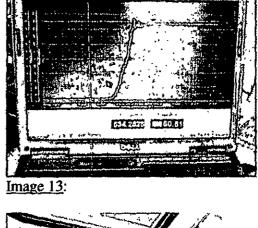


Image 10:



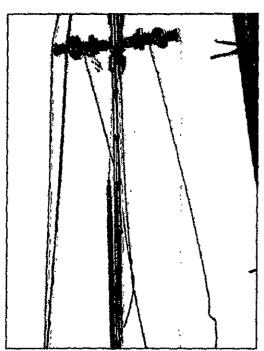
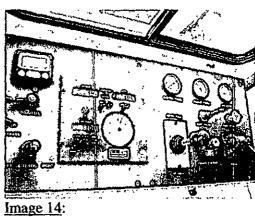


Image 11:



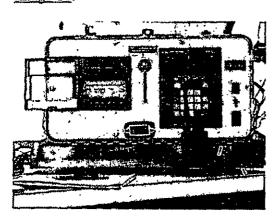
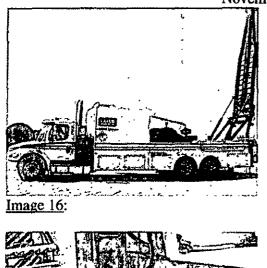
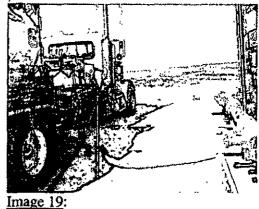


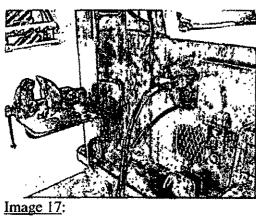
Image 15:

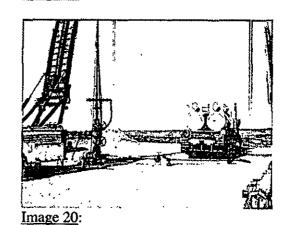
Navajo-Artesia WDW #3 EPA Annulus MIT and Tracer Test [API# 30-015-26575] (Carl Chavez & Leonard Lowe- OCD)

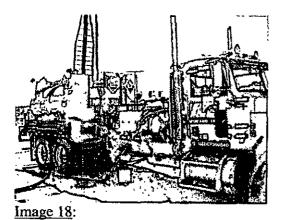
November 15, 2006

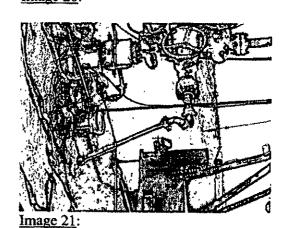




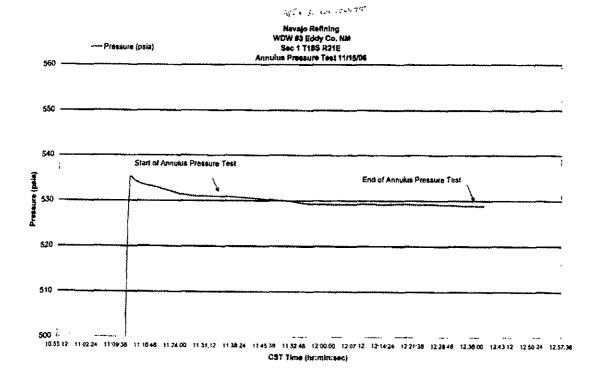


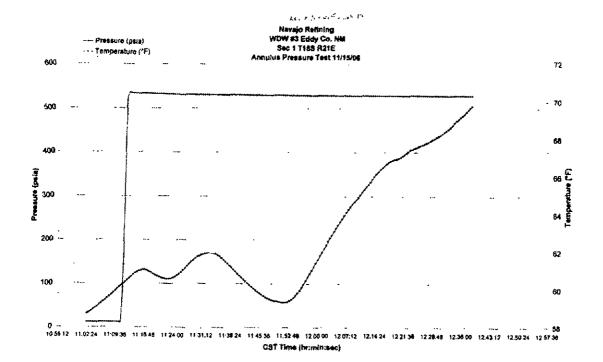






Navajo-Artesia WDW #3 EPA Annulus MIT and Tracer Test [API# 30-015-26575] (Carl Chavez & Leonard Lowe- OCD) November 15, 2006





District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV

State of New Mexico Energy Minerals and Natural Resources

May 27, 2004
Submit to appropriate District Office

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

☐ AMENDED REPORT

Form C-101

1220 S. St. F						a Fe, N				,		
APPI	JCAT	ON FO	R PERMIT	TO D	RILL, RE	ENTI	ER, D	EEPE	N, PLUGBA		R AD	
			NAVAJO RENII									
			NA VAJO RESINI	TO COMEN					30 - 015-2	6575	Jumber	
Proper	rty Code				Property	Name						No.
ļ					WD)	
			Proposed Pool t UECTION: PER	MO-PENN					l-rop	osed Pool (2	
t		· · · · ·			Surface	Locati	on			· · · · · · · · · · · · · · · · · · ·		
UL or lot no.							NonlyS	County Pierce	Feet from the	East/W	est line	County
	1 1BS 27E 22								750 FSL.	<u> </u>		EDDY
	,	·	8 Prope	sed Botto	om Hole Loca	ation If I		***************************************	Surface			
UL or lot no.	Section	Township	Range	Lot I	do Feet f	rom the	North/S	iouth line	Feet from the	Enst/W	est line	County
£		L	L	Ad	ditional W	ell Info	rmati	 on	· · · · · · · · · · · · · · · · · · ·	<u> </u>	J	···
11 Work	Type Code		12 Well Type Co			le/Rotary			Lease Type Code		15 Grou	nd Level Elevation
	E		<u>.</u>			X		· · · · · · · · · · · · · · · · · · ·	······		····	3609
16 Multiple 17 Proposed Depth NO 9051				uth		malios NYON			12 Contractor		2	Spud Date
Depth to Grou		NKNOWN		Distance	from nearest fro	sh water v		7 22/5	Distance from	n nearest s	urface w	nter 10 MO ES
Pit: Liner:	Synthetic		ils thick Clay	☐ Pit Vo	lume;bb			illing Mell	bod:			THE COLL ES
Close	d-Loop Sys	tem 🗌				···	Fr	esh Water	☐ Brine X Die	scl/Oil-bas	ed 🗀 C	Pas/Air 🔲
]	Propose	d Casing a	nd Cen	ent P	rogram				
Hole Si	ZC	Cas	ing Size	Casing	weight/foot	S	etting Do	pth	Sacks of Co	ment		Estimated TOC
17-1/	2"	13	3/8"	54	50#		400		425 - C	RC		
12-1/	4"	9	5/8"		36#		2604	>	1025 - C			
8-3/4	>>		7"	26#	and 29#		9450	•	1350 - C	IRC	<u> </u>	
Be3/4" 7" 26# and 29# 9450' 1350 - CIRC 2 Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary. ORIGINAL WELL NAME WAS CHALK BLUFF FEDERAL COM. NO. I WELL WILL BE PLUGGED BACK AND COMPLETED AS A CLASS I INJECTION WELL AS FOLLOWS: DRILL OUT BRIDGE PLUG AT 7010' AND CLEAN OUT 70 7208; INJECTION-TEST PERFORATIONS AT 7050-7102; 7262-7278' TO PLAN SQUEEZE CEMENT JOB; DRILL OUT BRIDGE PLUGS AT 7208' AND 7294'. CLEAN OUT HOLE THROUGH PERFS AT 7304-7314'; SQUEEZE-CEMENT PERFORATIONS AT 7050-7102; 7262-7278', AND 7304-7314'; DRILL OUT BRIDGE PLUG AT 7600' AND CLEAN OUT TO TOP OF LINER AT 9051'; RUN CBL/VDL AND CALIPER FROM 9051'TO SURFACE; PERFORATE 8540'-8620' AND 7660'-8450'; RUN INJECTION/FALL OFF TEST; RUN INJECTION/FALL OFF TEST; RUN DIFFERENTIAL TEMPERATURE SURVEY; RUN RNJECTION/FALL OFF TEST; RUN RDIFFERENTIAL TEMPERATURE SURVEY; RUN RADIOACTIVE TRACER SURVEY; INSTALL INJECTION TUBING AND PACKER TO APPROX. 7600', AND INSTALL WELL ANNULUS MONITORING EQUIPMENT, AND PREPARE FOR WEIL INJECTION. 13 Thereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines:, a general permit, or an (attached) alternative OCD-approved plan												
Printed name:	17841E	// M.	A		·-/····	Title:		0/	/			7.7.
			ater e W		, , .	Approva	l Date:	<u> </u>	06 Ex	piration D	ate: 6	111/07
Date: 6/29	106	ell. Mada	Phone: SAS	***********	MING. 60		ns of Ap	oroval Atte	iched 🗹 🐧	STRIC	مككورا	حاسراره و عر
	·		<u> </u>							J// (V)	<u>رزز - ا</u>	-4 /NU31

APPROVE CASING PROGRAM.

District 1

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

rict III

District IV

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 June 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

1220 S. St. Fran	cis Dr., Saut	a Fc. NM 8750	5				, 1		ENDED REPORT	
		W	ELL LOC	CATION	AND ACR	EAGE DEDIC	ATION PLA	T		
	API Numb	er		² Pool Code	Code Pool Nanic					
30	30 - 015 -26575					Nava	ijo Injection;	Permo-Penn	Ì	
' Property	Property Code ,					nino			Well Number	
					WDW			3		
OGRID	OGRID No.				Operator N		Blayntion			
	ļ			Na	vajo Refining	Company		3609' GL;		
									3625' KB	
			· · · · · · · · · · · · · · · · · · ·		10 Surface L	ocation	***************************************			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feel from the	East/West lin	e County	
N	1	18S	27E		790	South	2250	West	Eddy	
			11			~				

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

17 OPERATOR CERTIFICATION

				I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Shampe Datall Moore Printed Name Dataell Moore	
	1			Tille size B. stall Address Env. Mags. For Water a Waste Date Classell@navayo-ratining.c	»щ
		,		18 SURVEYOR CERTIFICATION 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 bettef.	
•	2250 —	◆ ↑ 790		Date of Survey Signature and Scal of Professional Surveyor:	
ا ا		+		Certificate Number	

REENTRY PROCEDURE

NAVAJO REFINING COMPANY'S WDW-3 (PROPOSED)

790'FSL and 2250' FWL, Section 1, T18S, R27E Eddy County, New Mexico Chalk Bluff Federal Com. No. 1, API No. 30-015-26575

All depths are in feet below well's original kelly bushing height (RKB) of 16 feet above ground level. The original KB elevation is 3625 feet above mean sea level. The ground level elevation is 3609 feet above mean sea level.

Tops of Geologic Formations (from RKB)

The base of the lowermost USDW is at 420 feet.

San Andres	1976 feet	Lower Wolfcamp	7303 feet
Yeso '	4030 feet	Cisco	7650 feet
Abo	5380 feet	Canyon	8390 feet
Wolfcamp	6745 feet	Strawn	8894 feet

Depth of Plugs

7010 feet in 7-inch casing above perforations 7050 feet to 7102 feet

7208 feet in 7-inch casing above perforations 7262 feet to 7278 feet

7294 feet in 7-inch casing above perforations 7304 feet to 7314 feet

7600 feet in 7-inch casing above perforations 7676 feet to 7678 and 7826 feet to 7830 feet

9800 feet in 4-1/2-inch liner above perforations 9861 feet to 9967 feet

Anticipated Formation Pressure

The expected bottom-hole pressure is 3448 pounds per square inch absolute (psia) at 9000 feet, for a gradient of 0.383 pounds per square inch (psi) per foot, or an equivalent



mud weight of 7.36 pounds per gallon (ppg). The bottom-hole pressure was determined from the pressure measured in Navajo's WDW-2, or 2813 psia, at 7570 feet. Navajo's WDW-2 is completed in the same interval proposed for WDW-3 and is located in 12-T18S-R27E, 3200 feet southwest of proposed WDW-3. The average specific gravity of the fluid in the Cisco and Canyon Formations is expected to be 1.025, which is the specific gravity of the fluid swabbed from WDW-2 in June 1999 from the interval between 7826 feet and 8399 feet. The expected bottom-hole pressure at 9000 feet in proposed WDW-3 is calculated below:

BHP (9000 feet) =
$$2813 \text{ psia} + (9000 \text{ feet} - 7570 \text{ feet}) \times 0.433 \text{ psi/ft} \times 1.025$$

= 3448 psia

Reentry Procedure

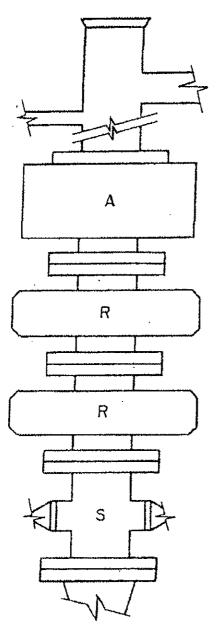
- 1. Level location to accommodate a workover rig, pump, tanks, and ancillary equipment. Build a small working pit approximately 30 feet square and 3 feet deep with a plastic lining. Move in the rig, tank, shale shaker, and work string.
- 2. Install a 7-1/16-inch, 3000-psi double hydraulic blowout preventer (BOP) and a 7-1/16-inch, 3000-psi annular BOP (see Exhibit A for schematic). Pressure test the BOP stack and casing to 1500 psi for 30 minutes. Pick up a 6-1/8-inch bit, and sufficient 4-3/4-inch drill collars to drill out the cement plugs, on a 2-7/8-inch work string. Mix a tank of 8.5-ppg sodium chloride brine water for circulating fluid.
- 3. Run the bit to 7000 feet and circulate the wellbore fluid out of the casing into a frac tank for disposal. Drill out the cast iron bridge plug (CIBP), cement at 7010 feet, and clean out to the CIBP at 7208 feet. Circulate the hole clean and pump into the perforations from 7050 feet to 7102 feet to establish a rate and pressure for a pending squeeze cement job.
- 4. Drill out the CIBP at 7208 feet and clean out past the perforations from 7262 feet to 7278 feet and drill out the third CIBP at 7294 feet. Clean out below the perforations from 7304 feet to 7314 feet. Run a second injection test for injection rate and pressure comparison.



- 5. Pull the bit and run a retrievable squeeze packer on the work string. Set the packer at 7150 feet and test for communication between the perforations. Squeeze the perforations from 7262 feet to 7278 feet and 7304 feet to 7314 feet with approximately 100 sacks of neat cement (actual squeeze cement volume to be determined by the injection rate established previously), attempting to reach 1500 psi to 2000 psi squeeze pressure. Release the packer and reverse out any excess cement, then re-test the perforations to the squeeze pressure.
- 6. Re-set the packer at 6900 feet and squeeze the perforations from 7050 feet to 7102 feet as before.
- 7. Lay down the squeeze packer and drill out the cement to the CIBP at 7600 feet. Conduct a pressure test to 500 psi for 12 hours to confirm the squeeze cement will contain the annular fluid pressure required during injection operations.
- 8. Drill out the CIBP at 7600 feet and circulate to the top of the liner at 9051 feet. Circulate the casing clean with 8.5-ppg brine water. Pull the bit and lay down the drill collars.
- 9. Run a cement bond log with variable density (CBL/VDL) from the liner top to the surface, followed by a baseline multi-finger caliper log from the liner top to the surface.
- 10. Perforate the intervals 8540 feet to 8620 feet and 7660 feet to 8450 feet with 2 JSPF, using hollow steel carrier perforating guns.
- 11. Run the work string and retrievable packer to 7600 feet. Swab, or backflow, the perforated interval to recover a representative sample of the formation water for laboratory analysis. Monitor the recovered fluid for hydrogen sulfide.
- 12. Conduct a short injectivity test with 8.5-ppg brine water to determine the need for stimulation. If required, stimulate the perforations with acid (type and amount to be determined from injectivity results), followed by 500 barrels of 8.5-ppg brine water.



- 13. Pull the work string and lay it down. Run a surface readout pressure gauge, with memory backup, to 7600 feet. Conduct an injection test down the casing at 420 gallons per minute for 12 hours (7200 barrels). Shut the well in and record the pressure falloff for a minimum of 12 hours.
- 14. Pull the gauges and run a differential temperature survey from surface to 9100 feet. Run a radioactive tracer survey to demonstrate mechanical integrity.
- 15. Run a tubing conveyed injection packer on 4-1/2-inch, 11.60 lb/ft, K-55, LT&C, 8rd injection tubing. Set the packer at approximately 7600 feet. Fill the annular space with 8.5-ppg brine water containing oxygen scavenger and corrosion inhibitor. Land the injection tubing in the wellhead and install the upper section.
- 16. Pressure test the annulus as required by New Mexico regulations.
- 17. Install well annulus monitoring equipment and prepare the well for injection.



A = ANNULAR BLOWOUT PREVENTER 7-1/16", 3000 psi working pressure

R = RAM TYPE BLOWOUT PREVENTER 7-1/16", 3000 psi working pressure

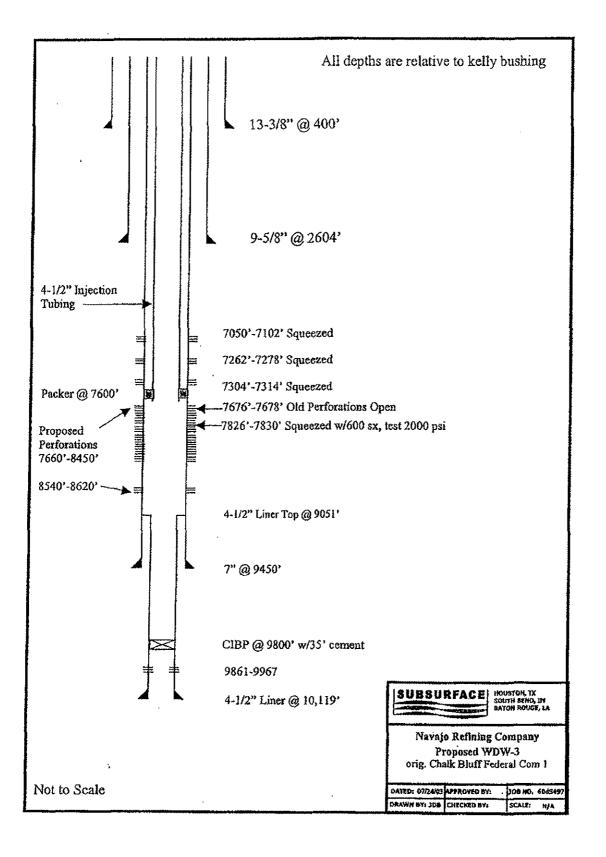
S = DRILLING SPOOL WITH SIDE OUTLETS 7-1/16", 3000 psi working pressure

Manual Choke Manifold 2", 3000 psi working pressure

Source: API RP 53, Recommended Practices for Blowout Prevention EquipmentSystems









NAVAJO REFINING COMPANY PROPOSED WDW-3 790' FSL, 2250' FWL, 1-T 18S-R27E EDDY COUNTY, NEW MEXICO

- 1. Existing Roads: Existing roads that lead to the proposed drillsite are shown on Exhibit A.
- 2. Access Roads To Be Constructed: No new access road is proposed.
- Location of Existing Wells: Existing wells within one mile of proposed WDW-3 are shown on Exhibit B.
- 4. <u>Location of Proposed Facilities If Well Is Completed</u>: The well will be shut in after completion and testing.
- 5. <u>Location and Type of Water Supply</u>: Water for reentry, testing, and completion operations will be purchased from a commercial water hauler.
- 6. Source of Construction Materials: No construction materials will be required.
- Methods of Handling Waste Disposal:
 - A. Drill cuttings will be disposed of in the drilling pits.
 - B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
 - C. Water produced during tests will be disposed of in the drilling pits.
 - D. Trash, waste paper, garbage, and junk will be buried in a trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind.
 - E. All trash and debris will be buried or removed from the wellsite after finishing drilling and/or completion operations.

8. Ancillary Facilities: None anticipated.

9. Wellsite Layout:

- A. The existing well pad will be leveled to accommodate a workover rig, pump, tanks, and ancillary equipment.
- B. Existing topsoil to a depth of 6 inches will be lifted and stockpiled at the uphill end of the well pad. The stockpiled topsoil will be located uphill to avoid mixing with subsurface materials.
- C. The well pad will be surfaced with material found in place.
- D. A small working pit will be constructed to hold drilling fluids and cuttings. The approximate dimensions of the pit will be 30 feet x 30 feet x 3 feet.
- E. The working pit for drilling fluids and cuttings will be lined with 6-mil plastic.

10. Plans for Restoration of Surface:

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. After abandonment, all equipment, trash, and junk will be removed and the location cleaned.
- D. The stockpiled topsoil will be spread over the surface of the location.
- 11. Surface Ownership: U.S. Department of Interior, Bureau of Land Management.
- 12. <u>Archaeological Survey</u>: Navajo Refining Company is conducting an archeological survey. The report of the survey will be submitted by Navajo under separate cover.
- 13. Operator's Representatives: Representatives responsible for assuring compliance with the approved Surface Use Plan:

Mr. Darrell Moore Navajo Refining Company Post Office Box 159 Artesia, New Mexico 88211 505/748-3311 Mr. Jim Bundy Subsurface Technology, Inc. 7020 Portwest Drive, Suite 100 Houston, Texas 77024 713/880-4640

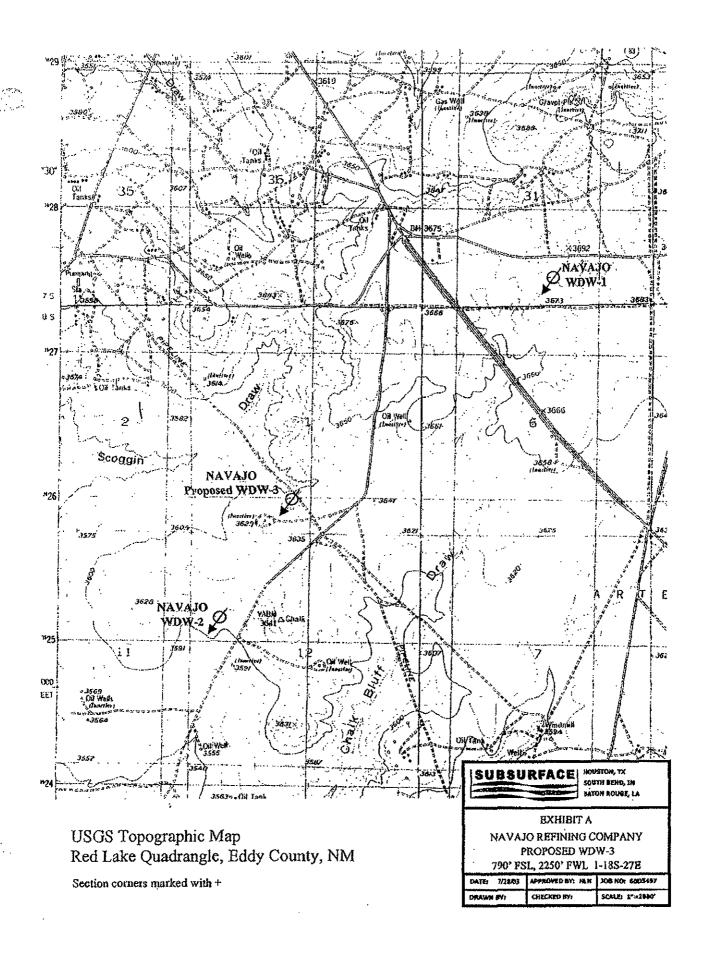
Exhibits

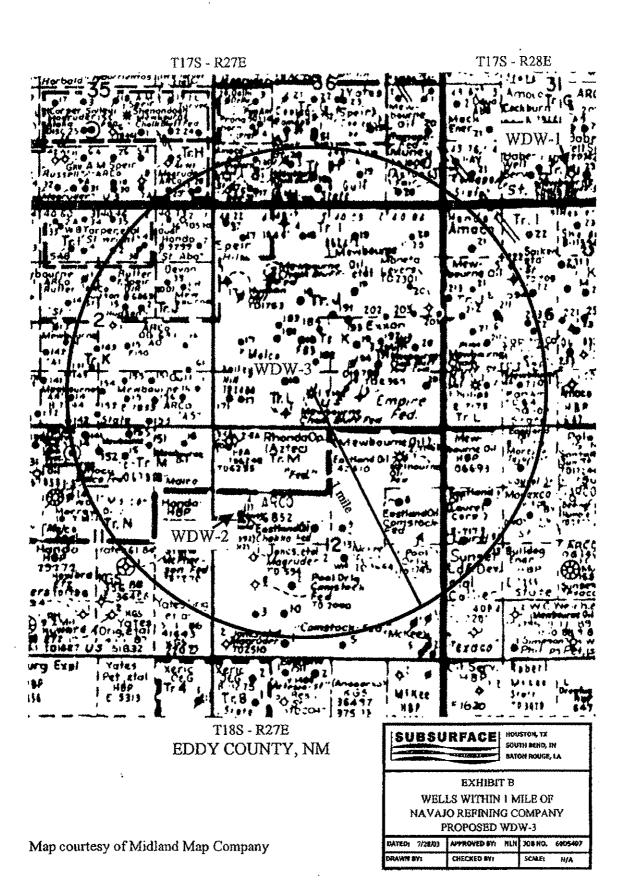
- A. Topographic Map
- B. Oil and Gas Map

14. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions that exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Navajo Refining Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

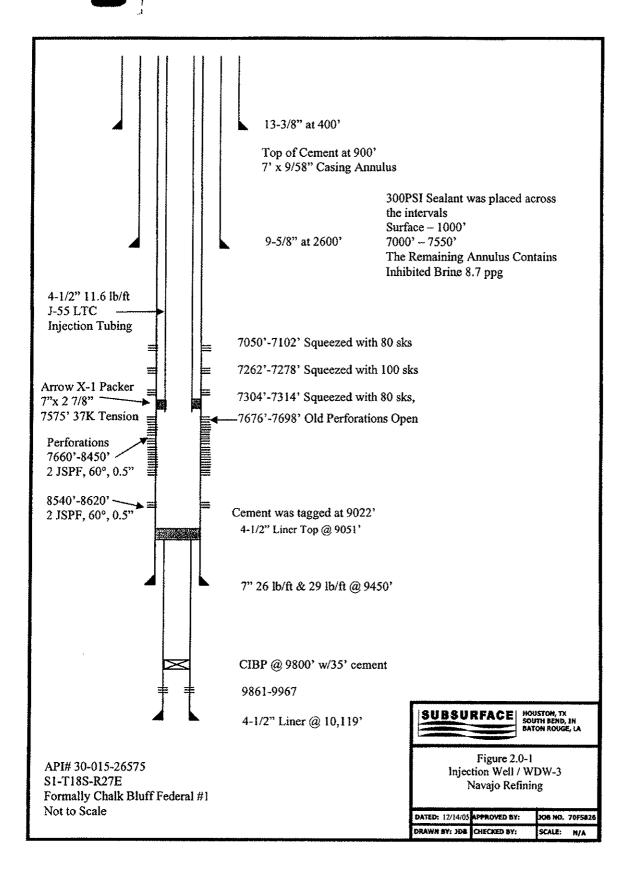
9/17/03	Danill More
Date	Darrell Moore
	EAU. Mgr. for Water Waite
	Navajo Refining Company Company





Submit 3 Copies To Appropriate District Office	State of Ne	w Mexico	Form C-103
District I	Energy, Minerals and	d Natural Resources	May 27, 2004
1625 N. French Dr., Hobbs, NM 88240			WELL API NO.
District II 1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVA	TION DIVISION	30 - 015 - 26575
District III			5. Indicate Type of Lease
1000 Rio Brazos Rd., Aztec, NM 87410	Santa Fa N	IN OTENS	STATE X FEE
District IV 1220 S. St. Francis Dr., Santa Fe, NM	Sama re, r	t. Francis Dr. VM 87505 345678970777	6. State Oil & Gas Lease No. NM-0557371
87505	NGES AND DEDODES ON	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
(DO NOT USE THIS FORM FOR PROPE DIFFERENT RESERVOIR. USE "APPL PROPOSALS.)	CICES AND REPORTS ON A OSALS TO DRILL OR TO DESIGN ICATION FOR PERMIT" (FOR M.C.	OR PLUCERACK TO A	7. Lease Name or Unit Agreement Name WDW - 3
1. Type of Well: Oil Well	Gas Well X Other	OCD ARTEC S	8. Well Number 3
2. Name of Operator	12	5.374	9. OGRID Number
NAVAJO REFINING COMPAN	Y \rac{1}{6}	0/4	
3. Address of Operator P.O?BOX 159, ARTESIA, NM 8	8211	See prezertodo	10. Pool name or Wildcat
4. Well Location			
1	790 feet from the SOUTH	line and 2250 feet from t	he WEST line
	18 south Range 27 East		ty Eddy
Section 1 Township	11. Elevation (Show wheth		
	GR 3609', RKB 3625'	er DR, KKD, K1, GR, etc.)	
Pit or Below-grade Tank Application			
Pit type N/A Depth to Groundwa	ter 100 FT Distance from neares:	t fresh water well 1 MH.F. Di	istance from nearest surface water 6 MILES
	mil Below-Grade Tank: Volu		
12. Check	Appropriate Box to Indic	ate Nature of Notice, I	Report or Other Data
NOTICE OF IN	NTENTION TO:	90110	SEQUENT REPORT OF:
PERFORM REMEDIAL WORK	PLUG AND ABANDON	• 1	and the second s
TEMPORARILY ABANDON	CHANGE PLANS		
PULL OR ALTER CASING	MULTIPLE COMPL	•	
, ore on the end of one	MOETH PE COME E	J CASING/CEIVIENT	30B 🖸
JTHER: To complete a Class 1 no	on-hazardous waste well 🥻	OTHER: Well com	pletion report to follow X
13. Describe proposed or comp	oleted operations. (Clearly sta	te all pertinent details, and	give pertinent dates, including estimated date ach wellbore diagram of proposed completion
or recompletion.	AK). SEE ROED 1103. FOR D	audipie Completions: Att	ach wellbore diagram of proposed completion
See attached well summary docume	nt and wall ashamatic		
See attached well summary docume.	nt and well schematic.		
MIT WHISSED DY C	Arl Chauez		
* * C * +	Fel		
No Chart Submi			
Mit Witnessed by C. No Chart Submit	/0·		
	<i>f</i>		
I hereby certify that the information	above is true and complete to	the best of my knowledge	and belief. I further certify that any pit or below-
Brane tank has been will be constructed or	I		r an (attached) alternative OCD-approved plan .
SIGNATURE	TAME TITT	E Env. Mar for 1	Notor & Waste DATE 1/19/07
			THE PARTY OF THE P
Type or print name	pled for record E-m	ail address:	Telephone No.
r State Use Only	DIEG IN		<u>k</u>
	WHOCH O.		
APPROVED BY:	TITL	.E	DATE
Conditions of Approval (if any):			

Energy, Minerals and Natural Resources Continue of the Con	Submit To Approp State Lease - 6 cop		rict Office			State of New 1	Mexico						Form C-105
1627 N. French Dr. Jesses, Nob. 28740 122 O South St. Francis Dr. 122 O South St. Francis	Fee Lease - 5 copie			Er مر	ergy	, Minerals and N	atural R	esources					
**Scripe 1 Township 18 South Rames 27 East NMFM D. Does Spendided 11. Dute 17 Deep Rec 77 D. Deep Rec 87 D. Deep Rec 97 Deep	1625 N. French Dr	., Hobbs,	NM 88240										
1.20 Surface No. 1940 Sarfa E. No. 1940		emie, Art	esía, NM 88210		C	Dil Conservation	Divisio	on			~		
Santa Fe, NM 87505 Well COMPLETION OR RECOMPLETION DEPENDANCE Waste Disposal Well Pype of Completion: NEW WORK X DEPPEN PLUG 1968 NEW WORK X DEPPEN PLUG 1968 NAVAIO REFINING COMPANY Address of Operator NAVAIO REFINING COMPANY Address of Operator Section 1 Township 18 South Range 27 East NMPM County Eddy, N		d Aston	NIM 97410		13	220 South St. F	rancis D	r.					. 🗖
WELL COMPLETION OR RECOMPLETION ESPECTAND LOG 1a. Type of Well GAS WELL DRY DYNAMING DRY DYNAMING DRY DYNAMING DRY DYNAMING DRY DRY DYNAMING DRY	≥ostrict IV					Santa Fe, NM	87505						<u>, Ll</u>
The production The				OD DEC	71 AD	LETION DEDO	DT AND	1100					
D. Type of Completion: NEW Work X DEEPEN PLUG DEEP NEW West OVER NEW WORK X DEEPEN PLUG DEEP NEW NEW WORK X DEEPEN PLUG DEEP NEW NEW			LETION	JR REU	JIVIP					7 Janes Name	T l /a . A .		
D. Type of Completion: NEW Work X DEEPEN PLUG DEEP NEW West OVER NEW WORK X DEEPEN PLUG DEEP NEW NEW WORK X DEEPEN PLUG DEEP NEW NEW			GAS WEL	. DR		OTHER Non-hazare	lous Waste	Disposal W	/ell	7. Lease Name	or Unit Ag	greement (Name
Net L OVER BACK STORE ST	b. Type of Com	nletion:				// .	1	6		Waste Disposal	Well / WE	OW - 3	
N. Address of Operator	NEW 🗀	WORK	X DEEPEN	PLUC		DIE VIII	À	(i)					
N. Address of Operator				BAC	K	RESVRO TO COTH	Elly V	[5]		0 11/1/1/ 0			
9. Pool name or Wildest 9. Pool name or	2. Ivanie of Opera	itoi				Apr.	EO	65		8. Well No. 3			
1. Nell Leastion			OMPANY		······································	/ 1	S/A	\Z/					
Well Lozation	3. Address of Ope	erator				13	.c)	87		9. Pool name or	Wildcat		
Unit Letter		RTESIA	NM 88211			182 pz 07.7	750 O	. <i>r</i>					
10. Date Spudded 11. Date T.D. Reached 12. Date Compt. (Ready to Prod.) 13. Elevations (DF& RKE, RT, GR, etc.) 14. Elev. Casinghead 12. Date Compt. (Ready to Prod.) 13. Elevations (DF& RKE, RT, GR, etc.) 14. Elev. Casinghead 12. Date Compt. (Ready to Prod.) 15. Total Depth 16. Plug Back T.D. 17. if Multiple Compt. How Many 18. Intervals 16. Plug Back T.D. 17. if Multiple Compt. How Many 18. Intervals 16. Plug Back T.D. 17. if Multiple Compt. How Many 18. Intervals 16. Plug Back T.D. 17. if Multiple Compt. How Many 18. Intervals 16. Plug Back T.D. 17. if Multiple Compt. How Many 18. Intervals 16. Plug Back T.D. 17. if Multiple Compt. How Many 18. Intervals 17. Plug Back T.D. 17. if Multiple Compt. How Many 18. Intervals 17. Plug Back T.D. 17. if Multiple Compt. How Many 18. Intervals 17. Plug Back T.D. 17. if Multiple Compt. How Many 18. Intervals 17. Plug Back T.D. 17. if Multiple Compt. How Many 18. Intervals		-	- 700 E	at From The	COURT	U Line and 2250 Foot	Comme Office	Wilder 1:					
10. Date Spundded	OHR Lette	•		wrom the	ווטעע	L. Line and <u>243V</u> Peel	riom ine	WEST LI	1C				
1.2/22/90	Section 1	Townsh	ip 18 South R					C	ounty	Eddy, NM			
15. Total Depth 16. Phas Back T.D. 17. If Multiple Compl. How Many 2 18. Intervals Clabel Tools Cable Tools Cable Tools Clabel Tools Cla	•	11.1		ied 12.			13.	Elevations DF	(DF& 3616	: RKB, RT, GR, -	etc.)	14. Elev	
10,119 ft 9020 ft Zones? Drilled By (Recentry Drill out CIBP) 9. Producing Interval(s), of this completion - Top, Bottom, Name Injection Interval 7660 ft to 8450 ft Cisco & 8540 ft to 8620 ft Canyon CBL/VDL, Temperature, Caliper, Radioactive Tracer, Pressure 22. Was Well Cored No CASING SIZE WEIGHT LB.FT. DEPTH SET HOLE SIZE CEMENTING RECORD 13 3/8" 54.50 400' 17 ½" 425-CIRC NONE 9 55/8" 36 2604' 12 ¼" 1025-CIRC NONE 7" 29 & 26 9450' 8 ¾" 1350-CIRC NONE 4. LINER RECORD LINER RECORD SACKS CEMENT SCREEN LINER RECORD SACKS CEMENT SCREEN SIZE DEPTH SET HOUE SIZE CEMENTING RECORD NONE 4. LINER RECORD LINER RECORD 25. TUBING RECORD LINER RECORD 44 ½" 75567' 7575' 6. Perforation record (interval, size, and number) 6. Perforation record (interval, size, and number) 6. Perforation record (interval, size, and number) 6. Perforation record (interval, size, and number) 6. Perforation record (interval, size, and number) 700 'TO 8620' /0.5" /2 JSPF /60° 800' TO 8450' /0.5" /2 JSPF /60° 100 'SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF				T.D.		<u>-</u>	Many					Cable	
19. Producting Interval(s), of this completion - Top, Bottom, Name Injection Interval 7660 ft to 8450 ft Cisco & 8540 ft to 8620 ft Canyon 22. Was Well Cored CBL/VDL, Temperature, Caliper, Radioactive Tracer, Pressure 22. Was Well Cored No No No No No No No No						ones?			-		out CIBP		10015
Injection Interval 7660 ft to 8450 ft Cisco & 8540 ft to 8620 ft Canyon	10 Producing Inte	mal(e)	of this complet	ion Ton Do	Han N								
CASING RECORD CASING RECORD (Report all strings set in well)							o 8620 ft	Canyon		20	. Was Din		
CASING RECORD (Report all strings set in well) CASING SIZE WEIGHT LB /FT. DEPTH SET HOLE SIZE CEMENTING RECORD AMOUNT PULLED 13 3/8" \$4.50 400' 17 ½" 425-CIRC NONE 9 5/8" 36 2604' 12 ½" 1025-CIRC NONE 7" 29 & 26 9450' 8 ¾" 1350-CIRC NONE 4. LINER RECORD 25 TUBING RECORD IZE TOP BOTTOM SACKS CEMENT SCREEN SIZE DEPTH SET PACKER SET 4 ½" 9051' 10,119' 175 NONE 4½" 7567' 7575' 6. Perforation record (interval, size, and number) 6. Perforation record (interval, size, and number) 6. Perforation record (interval, size, and number) 6. Perforation record (interval, size, and number) 7050' TO 7102' 30 SKS PREM 14.8 PPG CMT SQZ PERF 7050' TO 7102' 30 SKS PREM 14.8 PPG CMT SQZ PERF 7262' TO 7278' 100 SKS PREM 14.8 PPG CMT SQZ PERF 7262' TO 7278' 100 SKS PREM 14.8 PPG CMT SQZ PERF 8 8 PRODUCTION 8 ST PREM 14.8 PPG CMT SQZ PERF 7262' TO 7278' 100 SKS PREM 14.8 PPG CMT SQZ PERF 7262' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 8 PRODUCTION 8 ST PREM 14.8 PPG CMT SQZ PERF 8 NO CHOKE NIECTION PULL) (INDECTION PULMP)	21. Type Electric	and Oth	er Logs Run					Carryon		22. Was Weil (Cored		
CASING SIZE		BL/V	DL, Temper	ature, Cali	er, R	adioactive Tracer,	Pressure					No	
13 3/8" 54.50 400" 17 ½" 425-CIRC NONE 9 5/8" 36 2604" 12 ½" 1025-CIRC NONE 7" 29 & 26 9450" 8 ¾" 1350-CIRC NONE 4.	23.				CA		D (Rep	ort all s	trin				
9 5/8" 36 2604' 12 ¼" 1025-CIRC NONE 7" 29 & 26 9450' 8 ¾" 1350-CIRC NONE 4.4. LINER RECORD 4.4. SCREEN SIZE DEPTH SET PACKER SET 4.4/2" 9051' 10,119' 175 NONE 4.4/2" 7567' 7575' 6. Perforation record (interval, size, and number) 6. Perforation record (interval, size, and number) 6. Perforation record (interval, size, and number) 7. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED 7050' TO 7102' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7262' TO 7278' 100 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 8 PRODUCTION Bate First Production INJECTION PULL) ARE GIVEN TO SET NO. HOURS INJECT TON PUMP) ARE GIVEN TO SET NO. HOURS INJECT TEST NO. HOURS NO. CHOKE Test Portion N/A N/A N/A N/A N/A N/A N/A N/		E	***************************************									A	
1350-CIRC NONE					1							ļ	
4. LINER RECORD IZE TOP BOTTOM SACKS CEMENT SCREEN SIZE DEPTH SET PACKER SET 4 ½" 9051' 10,119' 175 NONE 4 ½" 7567' 7575' 6. Perforation record (interval, size, and number) 6. Perforation record (interval, size, and number) 7. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED 7050' TO 7102' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7262' TO 7278' 100 SKS PREM 14.8 PPG CMT SQZ PERF 7262' TO 7278' 100 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 8 PRODUCTION NIECTION WELL) ate of Test Hours Tested NO CHOKE INJECTION PUMP) Ate of Test Hours Tested NO CHOKE INJECTION PUMP) (SHUT-IN) (SH	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~											-	
TOP BOTTOM SACKS CEMENT SCREEN SIZE DEPTH SET PACKER SET	<u> </u>					3430) /4		1330-0	INC		NONE
TOP BOTTOM SACKS CEMENT SCREEN SIZE DEPTH SET PACKER SET								···· · · · · · · · · · · · · · · · · ·					
TOP BOTTOM SACKS CEMENT SCREEN SIZE DEPTH SET PACKER SET	24.				LIN	IER RECORD			25.	TU	BING RI	CORD	
6. Perforation record (interval, size, and number) 27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED 7050' TO 7102' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7262' TO 7278' 100 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 8 PRODUCTION Production Method (Flowing, gas lift, pumping - Size and type pump) Well Status (Prod. or Shut-in) (SHUT-IN) atte of Test Hours Tested No CHOKE Test Period N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	SIZE			***************************************				*******	SIZ	E			
DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED 7050' TO 7102' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7262' TO 7278' 100 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 8 PRODUCTION Tate First Production (INJECTION PUMP) (INJECTION PUMP) Tate of Test Hours Tested Choke Size NO CHOKE Test Period N/A	4 1/2"	-	9051'	10,11)' 	175	NO	NE		4 1/2"	750	57'	7575'
DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED DEPTH INTERVAL AMOUNT AND KIND MATERIAL USED 7050' TO 7102' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7262' TO 7278' 100 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 8 PRODUCTION Tate First Production (INJECTION PUMP) (INJECTION PUMP) Tate of Test Hours Tested Choke Size NO CHOKE Test Period N/A	26. Perforation r	L. ecord (in	nterval size or	d number)		<u> </u>	27 401	n cuon	EP 4	CONTINUE OFF	(17) kiran - ~ -	IIDD~-	F.77.0
7050' TO 7102' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7262' TO 7278' 100 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 7304' TO 7314' 80 SKS PREM 14.8 PPG CMT SQZ PERF 8 PRODUCTION Mate First Production Method (Flowing, gas lift, pumping - Size and type pump) (SHUT-IN) ate of Test Hours Tested Choke Size NO CHOKE INJECT TEST N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A		· · · · · · · · · · · · · · · · · · ·	, Siec, ui	a nomoci,			DEPTH I	D, SHUT,	rk/				
Total Production Production Method (Flowing, gas lift, pumping - Size and type pump) Well Status (Prod. or Shut-in)								****				*****	
PRODUCTION Sate First Production Age First Production NJECTION WELL) Age of Test Age of	0510 10 0020 71	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	W 1 7 00				7262' T	O 7278'					
Printed Name Production Method (Flowing, gas lift, pumping - Size and type pump) Production Method (Flowing, gas lift, pumping - Size and type pump) (SHUT-IN) Well Status (Prod. or Shut-in) (SHUT-IN) Water - Bbl. Gas - Oil Ratio N/A N/A N/A N/A N/A N/A N/A N/A			***************************************				7304' T	O 7314'		80 SKS PRE	M 14.8	PPG CN	AT SQZ PERF
NJECTION WELL) (INJECTION PUMP) (INJECTION PUM	28		• • • • • • • • • • • • • • • • • • • •	***************************************									
Test Period N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A						owing, gas lift, pumping	; - Size and	type pump))		rod. or Sh	ut-in)	**************************************
NO CHOKE INJECT TEST N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	Date of Test				JIVIP)	Prod'n For	Oil - Bbl		Gas		Water - Pl	hl	Gas - Oil Datio
Town Tubing Casing Pressure Calculated 24- Oil - Bbl. Gas - MCF Water - Bbl. Oil Gravity - API - (Corr.) Fig. 1. AX INJECT 750 PSI 8 BPM N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	10/10/04	4	une.	NO CHOKE		Test Period		A	~40				ľ
Hour Rate 8 BPM N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		**************************************		***	**************************************	Con	MCE		lotor Dhi	1000		<u> </u>
150 PSI 2. Disposition of Gas (Sold, used for fuel, vented, etc.) 3. List Attachments 2. ELL SUMMARY OF EVENTS, WELL WAS CONVERTED TO A CLASS I NON-HAZARDOUS WATER WASTE DISPOSAL WELL. A FULL REPORT WILL 3. I hereby certify that the information shown on both sides of this form as true and complete to the best of my knowledge and belief Printed Name Printed Title Env. Mer. Date 1/8/27	Press.		j			Jn - 150).	Gas -	MCL	ľ	acci - 150!.	UilG	ravity - A	v1 - (Corr.)
Disposition of Gas (Sold, used for fuel, vented, etc.) OGAS OGAS OLIST Attachments ELL SUMMARY OF EVENTS, WELL WAS CONVERTED TO A CLASS I NON-HAZARDOUS WATER WASTE DISPOSAL WELL. A FULL REPORT WILL OLLOW AT A LATER DATE. I hereby certify that the information shown on both sides of this form as true and complete to the best of my knowledge and belief Printed Date More Title Env. Mer. Date 18/07	MAX INJECT	750 P	SI	8 BPM		N/A		N/A		N/A	1		N/A
O List Attachments List Attachments ELL SUMMARY OF EVENTS, WELL WAS CONVERTED TO A CLASS I NON-HAZARDOUS WATER WASTE DISPOSAL WELL. A FULL REPORT WILL OLLOW AT A LATER DATE. I hereby certify that the information shown on both sides of this form as true and complete to the best of my knowledge and belief Printed Darrell More Title Env. Mer. Date 1/8/07	29. Disposition of C	ias (Sol	d, used for fuel	vented, etc.)			L			116	est Witness	sed Bv	
Printed Darrell More Title Env. Mer. Date 1/8/07	NO GAS 30. List Attachmen	ts		******	*								
Printed Daire! More Title Env. Mer. Date 1/8/8?	WELL SUMMARY FOLLOW AT A L	Y OF EN	/ENTS, WELL IATE.	WAS CONV	ERTE	D TO A CLASS I NON	I-HAZARI	OOUS WAT	rer y	WASTE DISPOS	AL WELL	A FUL	L REPORT WILL
Tature David More Printed Darrell More Title Env. Mar. Date 1/8/07	31 .I hereby certif	y that t	he informatio	n shown on	both s	ides of this form as ti	ue and co	mplete to	the b	est of my know	ledge and	belief	
Date 1/8/07	1					_					-	•	
· · · · · · · · · · · · · · · · · · ·	"~nature	سبر	~ + , ,	•	1	Name Varre	1 TVIDA	rc Titl	_e L	.nv. Mgr.			Date Ilela?
	سادات ۸ ائین	٦.	أمد المحم			· ·				•			1/4/01



Well Summary

Navajo Refining Company (Navajo) contracted Subsurface Technology, Inc. (Subsurface), to prepare an application for permit and to reenter a plugged and abandoned (P&A) oil and gas well. The Application for Permit to Drill or Reenter and the Sundry Notices and Reports on Wells was submitted to the Department of the Interior, Bureau of Land Management (BLM), on June 29, 2006 and approved. The Application for Permit to Drill, Re-enter, Deepen, Plug Back, or add a Zone was submitted to the State of New Mexico Oil Conservation Commission (OCD) on June 29, 2006 and approved.

Subsurface prepared an engineering plan to reenter the P&A'ed oil and gas well formally owned by Mewbourne Oil Company. The original well name was Caulk Bluff Federal #1 (API number 30-015-26575), and a Change of Operator application was submitted to the OCD on December 5, 2000 and approved under the well name of WDW-3. Under contract to Navajo, Subsurface commenced field operations on September 25, 2006. The existing location was cleared and prepared for reentry operations. An earthen lined reserve pit was dug to catch returns. All depths unless stated are referenced to rig floor at six feet to seven feet above ground level. The rig floor was moved from six feet to seven feet after drilling out the cast iron bridge plugs.

A workover rig and reverse unit was placed on location and the existing wellhead was removed. The first cast iron bridge plug (CIBP) at 7010 feet was drilled and the perforated interval from 7050 feet to 7102 feet was squeezed off with neat cement and successfully pressured tested to six hundred eighty pounds per square inch gauge pressure (680 psig). The second and third CIBP at 7190 feet and 7279 feet was drilled. There appeared to be ten feet of cement on top of the third CIBP. The perforated interval from 7262 feet to 7278 feet and from 7304 feet to 7314 feet was squeezed with neat cement. The squeezed interval was pressure tested to 920 psig and would not hold. A second cement squeeze was performed across the perforated interval from 7262 feet to 7278 feet and from 7304 feet to 7314. The interval was pressured tested to 630 psig and continued to lose pressure at a rate of two pounds per square inch every thirty minutes (2 psi/30 min). The fourth CIBP at 7595 feet was drilled and at 7838 feet a cement plug was encountered and drilled through. Cement was tagged twenty nine (29) feet above the top of the liner at 9022 feet. The hole was circulated clean and prepared for logging.

A Cement Bond Log (CBL), Variable Density Log (VDL), caliper log, and temperature survey were performed. The CBL/VDL showed that the top of the cement (TOC) behind the 7-inch casing was located 900 feet from the surface. The OCD was notified and approved the existing well condition. The casing was perforated from 7660 feet to 8450 feet and from 8540 feet to 8620 feet at 2-JSPF on sixty degree (60°) phasing.

A packer was set at 7546 feet with 2 7/8-inch PH-6 tubing, the well was swabbed back and samples of the formation fluid were recovered. It was estimated that two hundred twenty six barrels (226 bbls) of formation fluid was returned to the surface. A pressure test on the annulus between the 7-inch and 2 7/8-inch was performed at 660 psig with the annulus losing pressure at a rate of 8 psi/hr.

An injection test was performed on the well down the 2 7/8-inch tubing with the annulus open to the bottom of the well. The open annulus will allow for the calculation of the bottom hole pressure while pumping down the 2 7/8-inch tubing with out the influence of tubing friction pressure on the bottom hole calculations. The injection rates were from two barrels per minute (2 bpm) to ten barrels per minute (10 bpm). From the data collected during the injection test it appears that the well will be able to accept an injection rate up to 10 bpm at the permitted pressure of 1550 psig with 4 1/2-inch, 11.6 pound per foot (11.6 lb/ft) tubing in the wellbore.

At the request of the OCD, Subsurface went back into the wellbore with a retrievable bridge plug (RBP) to test the casing and isolate any leaks to within 1000 feet. The RBP was set at 7550 feet and the packer was set at 6985 feet to isolate the squeezed interval from 7050 feet to 7314 feet. The squeezed interval was pressure tested to 490 psig and the annulus to 632 psig. The squeezed interval was losing pressure at a rate of 6 psi/hr and the annulus was gaining pressure due to thermal affects. The RBP was moved up the wellbore to 1255 feet and casing pressure tested to 569 psig. The casing above 1255 feet was losing pressure at a rate of 2 psi/hr. The casing leaks were isolated to the squeezed interval from 7050 feet to 7314 feet and in the interval from surface to 1255 feet. The OCD was called and approved the 300PSI sealing application to stop the casing leaks across the two intervals.

The 4 1/2-inch tubing was run into the wellbore and the Arrow X-1 packer was set at 7575.73 feet with 37,000 lbs of tension. Prior to running the 4 1/2-inch tubing a new Superior hanging spool was installed. Prior to setting the tubing packer, the annulus between the 4 1/2-inch tubing and the 7-inch casing was filled with inhibited brine, with the 300psi sealant across the squeezed perforations and across the upper section of the 7-inch casing. Once the packer was set and casing hung off in the spool a new Superior wellhead was installed and the P-seals were pressure tested to 3000 psig. After the wellhead was assembled the annulus was squeezed at 545 psig for four hours (4 hrs) as specified by the sealant manufacture representative on site. The annulus was then pressure tested to 480 psig overnight with no pressure loss. Workover rig was disassembled and moved off location with all associated equipment.

A 12 hr pump in and falloff test was performed down the 4 1/2-inch tubing. To maintain a surface injection pressure that was below the permitted pressure of 1550 psi the injection rate was lowered to 9 bpm at the end of the pump in procedure. The BHP gauge was placed at 8630 feet for 14 hrs to monitor BHP, when the gauge was pulled five minute (5 min) gradient stops were made every 1000 feet with the first stop at 7000 feet. The analysis of the data showed interference from the adjacent injection wells, which skewed the results for determination of the skin and possibly the permeability. The equipment used to perform the falloff testing was moved off location to prepare for mechanical integrity testing (MIT).

The MIT was performed and witnessed by the OCD. The MIT consisted of an annulus pressure test, and a radioactive tracer survey. The temperature survey was performed during the CBL/VDL logging event and will be used as a baseline for any future temperature surveys. The annulus pressure test was performed at 530 psia and lost 2.5 psi over a one hour period, which was within the OCD requirements of five percent (5%)

over a 30 min time interval. The radioactive tracer survey showed no signs of fluid flow out of the permitted interval above 7650 feet. The OCD witnessed the annular pressure test and the first half of the radioactive tracer survey.

The annulus monitoring system was installed and tested. The well was turned over to Navajo for injection.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1600 Rio Brazos Road, Aztec, NM 87410
Tict IV
0 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico rgy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-144 June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Senta Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade ta: Type of action: Registration of a pit	nk covered by a "general plan"? Yes \(\subseteq\) No or below-grade tank \(\superatorname{\subseteq}\) Closure of a pit or below-grade.	ade tank (2)
Operator: Review of Refining Community Telephon	ne: (505) 748-331/ e-mail address:	
Address: SOI East Mark Street And	ESIG IVM 88210	
Facility or well name: WOW #3 API#: County: Eddy Latitude	30 -0/3 -265 75 U/L or Qtr/Qtr	SecT
County: Eddy Latitude	Longitude	NAD: 1927 🗌 1983 🗍
Surface Owner: Federal A State Private Indian		
Pit	Below-grade tank	
Type: Drilling Production Disposal	Volume:bbl Type of fluid:	
Workover Emergency	Construction material:	_
Lined DUnlined	Double-walled, with leak detection? Yes [] If no	t, explain why not.
Liner type: Synthetic (PThickness 22 mil Clay [
Pit Volumebbl		-
Double to the description of the second seco	Less than 50 feet	(20 points)
Depth to ground water (vertical distance from bottom of pit to seasonal	50 feet or more, but less than 100 feet	(10 points)
high water elevation of ground water.)	100 feet or more	(0 points)
Wellhead protection area: (Less than 200 feet from a private domestic	Yes	(20 points)
water source, or less than 1000 feet from all other water sources.)	(No.)	(0 points)
<u></u>	Less than 200 feet	(20 points)
stance to surface water: (horizontal distance to all wetlands, playas,	200 feet or more, but less than 1000 feet	(10 points)
,ation canals, ditches, and perennial and ephemeral watercourses.)	(1000 feet or more)	(0 points)
	Tool leer of more	(o poins)
	Ranking Score (Total Points)	10
If this is a pit closure: (1) Attach a diagram of the facility showing the pit's	s relationship to other equipment and tanks. (2) Indica	ate disposal location: (check the onsite box if
your are burying in place) onsite 🔲 offsite 💢 If offsite, name of facility 🗘	(3) Attach a general d	escription of remedial action taken including
remediation start date and end date. (4) Groundwater encountered: No 17		
(5) Attach soil sample results and a diagram of sample locations and excavat		
		-11/10/2 2/4 201 4/05
Additional Comments: Navajo REFINING Comp WDW #3 RSpET NEW MEXICO OIL	Course to bland Division	1 20 11
14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CONSTRATION DIVISION FO	HE SO IN THE PIP
AND BELOW GrAde tANK Guide I'M		
Drill cuttings, All cuttings will !		
Disposal and Backfill with onsite .	Hockpiled soils. WE Will No	dife O.C.D 48 hours
Prior to BegINING WORK,		
The sale and the their the information about 1		
I hereby certify that the information above is true and complete to the best of has been/will be constructed or closed according to NMOCD guidelines	of my knowledge and benefi. I further certify that the M. a general permit or an (attached) alternal	ie above-described pit or below-grade tank
	7, 2,	approved pion [2].
Date: 2/14/06		
Printed Name/Title Charl Matter and Page 18	Signature Land	
Your certification and NMOCD approval of this application/closure does not otherwise endanger public health or the environment. Nor does it relieve the regulations.	ot relieve the operator of liability should the contents the operator of its responsibility for compliance with ar	of the pit or tank contaminate ground water or y other federal, state, or local laws and/or
Anoroval: Desirable Sec.		
Allen Tolling Control of the Control	"	Date: 2/19/67
Androval: Jens W. Beense	Signature	Date: ~ / / 7 10 '

1		037	,												
A W	Form 100	180 M	ର 🌣	BUR	PARTM EAU C	ITED STAT IENT OF TH OF LAND M	E INTI ANAGI	EMENT						OMBNO.	PPROVED 1004-0137 uch 31, 2007
` .	F.O.	S. WE	LL QOM	PLETIO	N OR	RECOMPLE	TION	REPOR	RT AND	LOG			5. Lease NM -	Serial No. 0557371	
n Nije	la 😘	of Well		eli 🔲 Ga	s Weli	Dry 0	ther					-	6. If Indi		or Tribe Name
103/	b. Pype	of Complet	rig.	New W	en 🔼	Work Over	Deepe	n Při	ng Back	Diff	Resvr, .		N/A 7 Unit o	r CA Agree	ement Name and No.
	2 Name	of Operate	05 25222	Other		NAMA	··········							-	
			1775 7 734	IO REFIN									WD	Name and W - 3	Well No.
	3. Addre	SS P.O. I	BOX 159, A	artesia,	NM 882	31		3a. Ph	one No. (i	nchide ai	rea code)). AFIW 30 - 0	(ell No. 2657 - 2657	/5
	4. Locat	ion of Well	(Report loc	ation clearl	y and in a	ccordance with	Federal :	requiremer	115)*			10	0. Field :	nd Pool, o	r Exploratory
	At su	rface 7	796' FRON	THE SO	U TH L II	NE AND 2250°	FROM	THE WE	ST LIN	E		<u> </u>			
	At top	prod. inte	rval reported	l below 76	56' AT '	THE SAME LA	DCATI	ON AS A	BOVE			1	I. Sec., I Survey	or Area	n Block and Si - Tiss - R27E
						E SAME LOC						Tr.		y or Parisa	13. State NM
	14. Date 5		I DOG BA	15. Date				16. Date C				ï	EDDY 7. Elever		RKB, RT, GL)*
	12/2:	2/1998		01/	29/19 9 1			J D d			to Prod.		3609'		
	ia. Total	•	(D 10,119		19.	Plug Back T.D.:				20. Dej	oth Bridge	e Plug Se	e MD TVI	, ,	CMTI 9051'-9022'
	21 Taran		VD 10,119		- Dun (8	ubmit copy of e	TVD 9	0022'		33 117-			No L		CMT 9051'-9022' mit analysis)
	•••			-	•	, RADIOACTI	•	ACED (%	1		s weil con DST ru				mit anatysis) mit report)
						set in well)	· · · · · · · · · · · · · · · · · · ·	ACER (2)	,	Dir	ectional S	urvey?	V N₀	Yes (Submit copy)
	Hole Size	Ţ			p (MD)	Bottom (MD)		Cementer		Sks. &	Sium	y Vol.	Coment	Ton*	Amount Pulled
	17 1/2"	13 3/8		`	URF	406*	486°	epth	· · · · · · · · · · · · · · · · · · ·	Cement	(B	BL)	SURF	тор	NONE
	12 1/4"	9 5/8")RF	2604"	2604		1025 H		+		SURF		NONE
	8 3/4"	7 ^H	29 8	. 26 SI	JRF	9450'	9450)*	1350 "	'H"			9001		NONE
	6 1/4"	4 1/2"	'	90	51'	10,119'	10,1	19'	175 CI	ASS H			9851'-	TOL	NONE
		 			······································	<u> </u>	-		·		-			·	
	24 Tubin	g Record					<u> </u>		·			J		······································	
	Size		Set (MD)	Packer Dep	th (MD)	Size	Depth	Set (MD)	Packer D	epth (MI))	Size	Depth	Set (MD)	Packer Depth (MD)
	4 1/2" 25. Produc	7567'	ale l	7567'		······································	34	Perforation	Dansed		.1				l
	23. 11000	Formation		T	ор [Bottom		Perforated			Size	No. I	loles	I	Perf. Status
	A) CISC	00		765	,	8450	7660	' - 845 0 '		0.	5"	1586		2 JSPF	
		YON		854) '	8620'	8548	'- 8628'		Ð.	5 ¹¹	160		2 JSPF	/ 6 0 °
	<u>C)</u> D)						+								
		Fracture, Tr	catment, Ce	ment Squeez	z, etc.		<u>.L</u>		······································	<u>-</u>	,	l			· · · · · · · · · · · · · · · · · · ·
•		epth Inter	vai		~~~~				mount and						
	7050' - 7	· · · · · · · · · · · · · · · · · · ·	·· - ······			M 14.8 PPG N			~	 					
	7262' - 7					em 14.8 PPG I M 14.8 PPG N									
										£		JUNIE			
	28. Produ				2			1		·		·			
	Produced	Test Date	Hours Tested	Production	Oil BBL	MCF B	ader BL	Oil Grav Corr. Al	गें 	Gas Gravit	У	roduction NON-MAI		LASS I WE	T.
	Choke Size	Tbg, Press, Flwg. SI		24 Hr. Rate	Oil BBL	Gas W MCF B	ater BL	Gas/Oil Ratio		Well St		WAITING	ON STAT	E APPROV	al to inject
	28a Produ					······································									
	Date Pirst Produced	Test Date		roduction	Oil BBL		der)L	Oil Grav Corr, AF	ity I	Gas Gravity	ŀ	roduction		Lass I wei	a.
	Choke Size	Tog. Press. Flwg.		24 Hr. Rate	Oit BBL	Gas W. MCF BI	nter 31,	Gas/Oil Ratio		Well Sta	jan				1

*(See instructions and spaces for additional data on page 2)

WAITING ON STATE APPROVAL TO INJECT

28h Prodi	oction - Inte	rval C						· · · · · · · · · · · · · · · · · · ·		
Date First	Test	Hours	Test	Oil BBL	Gas MCF	Water	Oil Gravity	Gas	Production Method	
Produced	Date	Tested	Production	BBL	MCF	BBL	Corr. APT	Gravity		
Choice.	Tbg. Press.	Csg. Press.	24 Hr.	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status		
Size	Flwg. SI	TIGS.	Rate	<i>D.D.</i> 2.	I IIICI	J				
28c. Prod	nction - Int	ervai D			1					
Date First	Test	Hours Tested	Test	Oil	Gas MCF	Water BBL	Oil Gravity	Gas	Production Method	
Produced	Date	TOSTOT	Production	BBL	MCr	BBL	Corr. API	Gravity		
Choke	The Press.	Cag.	24 Hz.	Oil	Gas	Water	Gas/Oil	Well States	L.	
Size	Flwg. SI	Press.	Rate	BBL	MCF	BBL	Ratio			
29. Disp	osition of G	as (Sold, 1	used for fuel,	vented, etc	.)		 ,	.1		, , , , , , , , , , , , , , , , , , ,
N/A	(NON-H	AZARDO	US CLASS	I WELL)					
30. Sum	mary of Por	ous Zones	(Include Ag	rifers):		·····		31. Formati	on (Log) Markers	
tests,	v all import including o ecoveries.	lant zones lepth inter	of porosity a val tested, cu	und conten shion used,	ts thereof: (time tool op	Cored interva en, flowing a	ls and all drill-stem and shut-in pressures			
		Тор	Bottom		Danne	ntions Conts	nte ato		Name	Тор
rom	aation	roh	DOME		Descri	ptions, Conte	IMS, CAC.		Name	Meas. Depth
										}
		1								
								1		
				ł						[
		1								
			-							
			<u> </u>							1
										İ
										1
										}
32. Additi	ional remar	ks (include	plugging po	ocedure):			······································	<u> </u>		
		-		•						
REC EXIS SQU	OMPLET STING PL EEZED O	ed the UGS WE IFF WITI	well fo re drile i cemen	R INJEC .ED OUT F AT 7050	TING NON TO THE 1 I' TO 7102'	I-HAZARD OP OF TH ', 7262' TO	OUS WASTE WA E LINER PLUG A 7278', AND FROM	TER FROM LT 9022' AN 1 7344' TO 7	MPANY BY NAVAJO REFII I THEIR REFINERY IN AR D THE EXISTING PERFOR 314'. A 4 1/2" 11.6 #/FT TUB WAS WITNESSED BY OCI	TESIA, NM. THE ATTIONS WERE ING STRING
(SEE	ATTACI	IED WEI	LL SUMML	ARY FOR	MORE D	ETAILS)				
33. Indicat	te which itn	nes have be	en attached	by placing	a check in ti	e appropriat	e boxes:	······································		
☑ Ele	ctrical/Med	hanical Lo	gs (1 full set	req'd.)	☐ Ge	ologic Report	DST Report	Direction	al Survey	
☑ Sur	dry Notice	for pluggi	ng and cemen	t verificati	on 🔲 Con	e Analysis	Other:		·	
34. Thereb	y certify th	at the fore	coing and att	ched info	mation is co	mplete and co	wrect as determined fi	rom all availat	de records (see attached instruction	003)*
Name (olease prin		Darre	11 /	Moor	<u>د</u>	Tide E	nu. M	gr for Water	~ Waste
Signati	ure <u> </u>	<u>-</u> J)a	ul	IN	the		Date	1/24/0	7	
Title 18U.	S.C Section	n 1001 and	Title 43 U.	S.C Section	or 1212, maj	ce it a crime	for any person knowi	ngly and willf	fully to make to any department (or agency of the United

16.	ورورورورورورورورورورورورورورورورورورور	1037 V													
S. A. A.	Form (Agenda	180 %	23456		DEPAR BUREAU	UNITED STATEMENT OF TO	THE IN	GEMENT						OMBNO	LPPROVED 1004-0137 (arch 31, 2007
	3. C.	& ME	LL GO	MPLE	TION O	R RECOMP	LETIO	N REPOI	RT AND	LOG			5. Lease NM	Serial No. - 0557371	
	ia.	of Well		Vell [Gas Wel		Other		····					m, Allotte	e or Tribe Name
N. C. W.	b. Type	of Comple	itog.		cw Well	Work Over		pen [P	ng Back	☐ Diff.	Resvr,	•	N/A Z Unit o	r CA Agre	ement Name and No.
1,1	9LGL4	of Operat	Of MAN	Other	POTATIAL	COMPANY					,				
			11/61/					*******					WD	Name and W - 3	Well No.
	3. Addr	ess P.O.	BOX 159,	ARTE	sia, nm	88211	-	3a. Ph	one No. (i	nchide ari	ea code)) '	9. AFIW 30-0	/ell No. 015 - 265	75
	4. Loca	tion of Wel	l (Report l	ocation (learly and	in accordance wi	th Federa	al requiremen	113)*	*************	~~~~~	I	0. Field :	and Pool, o	or Exploratory
	At su	rface .	790' FRO	M THI	SOUTH	LINE AND 22	50' FRO	M THE WI	ST LIN	E		<u> </u>		F 73. 34	
	At to	p prod. inte	rval report	ed below	765 8 ° A	T THE SAME	LOCAT	TION AS A	BOVE			1	Survey	i., K., M., (y of Á rea	on Block and St - T18S - R27E
						THE SAME L						1	2. Count	y or Parish	13. State NM
	14. Date				Date T.D. I			16. Date C		······		ī			RKB, RT, GL)*
		2/1990			01/29/19			□ D &		Ready			36091		
	is. Total	-	MD 10,11		1	19, Plug Back T.I			1	20. Dep	dh Bridg	e Plug Se	e MD TVI		CMT 9051'-9022'
	71 70-		VD 10,11		I Com Div	(Submit copy o		9022'				- <u></u>			CMT 9951'-9822'
					_	• • • • • • • • • • • • • • • • • • • •	•	TO A 4700 to 424			well co DST m				bmit analysis) bmit report)
						MP, RADIOAC	TIVE	RACER (2)	rvo):	Dire	ctional :	Survey?	₹ №	Yes (Submit copy)
						igs set in well)	Stag	e Cementer	No of	Sks. &	Share	ry Vol.			A D.R. J
	Hole Size			(#/fL)	Тор (МІ		ш) <u> </u>	Depth	Type of	Cement	J. (E	E L)	Cement	·····	Amount Pulled
	17 1/2"	9 5/8"		5	SURF	408°	48	0' 64'	425 CI 1025 "	ASS C	ļ		SURF		NONE
	8 3/4"	7"		& 26	SURF	94501			1350				960'		NONE
	6 1/4"	4 1/2'			9051'	10,119'	10.	,119'		ASS H			9051'-	TOL	NONE
		ļ			,, , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,										
	24 Tubin	g Record	L						L	······································	L			· · · · · · · · · · · · · · · · · · ·	
	Size	~,	Set (MD)	Packe	r Depth (Mi	D) Size	Dep	th Set (MD)	Packer D	epth (MD	भ	Size	Depth	Set (MD)	Packer Depth (MD)
	4 1/2" 25. Produ	7567	-1-	7567	•			Perforation			<u> </u>				
	23. Plocu	Formatio		—-г	Тор	Bottom	26.	Perforated		γ	Size	No. I	foles	<u></u>	Perf. Status
	A) CIS	00			7650	8456	766	0' - 8450'		0.5		1580		2 JSPF	
		YON			8546'	8620	854	10'- 8620'		0.4	5**	160		2 JSPF	16 6 0
	C) D)							· · · · · ·			•••••••••••	 			<u> </u>
		Fracture, Ti	restment, C	ement S	queeze, etc.		L								
	1	Depth Inter			****				mount and						
	7050' - 7				80 SKS P	REM 14.8 PPC	NEAT	CMT FOR	PERF S	QZ ON I	REVI	OUS PE	RFORA	TION	
,	7262' - 7 7364' - 7					Prem 14.8 PP Rem 14.8 PPG									
•										2		00011	70.0101	*******	
;		ction - Inte			7 22	1.0	1								
	Date First Produced	Test Date	Hours Tested	Product	ion BBL	GM MCF	Water BBL	Oil Grav Corr. Al	1 ·	Gas Gravity		Production NON-BIA:		lass i we	14.
	Choke Size	Thg. Press. Flwg. SI	Cage. Presse.	24 Hr. Rete	Oil BBL	Gas MCF	Water BBL	Gus/Oil Rutio	.,	Well Stud	tos	WAITING	ON STAT	e approv	AL TO INSECT
	28a. Proda														
	Date First Produced	Test Date	Hount Tested	Test Production	m BBL	Gas MCF	Water BBL	Oil Grav Cour. AP	iy I	Gas Gravity	Ţ,	roduction	Method		<u> </u>
	Choke	Thg. Press.	Cage.	24 Hz.	Oil	Gas	Water	Gas/Oil		Well State		NON-BAI	AZOUS C	LASS I WE	ır
	Size	Flwg.	Press.	Rate	BBL	MCF	BBL	Ratio		MCH OTHER	-				

WAITING ON STATE APPROVAL TO INJECT

28b. Prode	action - Inte	ryal C							
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke. Size	Tbg. Press. Flwg. Si	Csg. Press.	24 Hr. Rato	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
28c. Prod	oction - Int	crvai D		 		<u></u>			
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Thg. Press. Flwg. SI	Csg. Presa.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well States	
29. Disp	osition of G	ias (Sold, 1	sed for fuel,	vented, etc	; 			· · · · · · · · · · · · · · · · · · ·	
N/A	(NON-H/	ZARDO	US CLASS	I WELL)					
30. Sum	mary of Por	ous Zones	(Include Aqu	tifers):				31. Formati	on (Log) Markers
tests,	v all import including o ecoveries.	ant zones lepth interv	of perosity a val tested, co.	und content shi on used,	s thereof: (time tool op	Cored interval en, flowing a	is and all drill-stem ad shut-in pressures		
F7	41	Тор	Bottom		Descri	ptions, Conte	nis etc	1	Name Top
rom	nation	, cop	Double		Dosai	prioris, come	143,007.		Meas. Depth
27 6 4 4 4 4									
THE REC EXI: SQU	PLUGGI OMPLET STING PL EEZED O	ED AND A TED THE UGS WE	WELL FO RE DRILL H CEMEN	ED WEL R INJEC ED OUT I AT 7056	TING NO! TO THE 1 ' TO 7102'	N-HAZARD FOP OF TH ', 7262' TO	OUS WASTE WA E LINER PLUG A 7278', AND FROM	TER FROM AT 9022' AN I 7384' TO 7.	MPANY BY NAVAJO REFINING. NAVAJO I THEIR REFINERY IN ARTESIA, NM. THE D THE EXISTING PERFORATIONS WERE 314'. A 4 1/2" 11.6 #/FT TUBING STRING WAS WITNESSED BY OCD.
(SEE	ATTACE	IED WEI	LL SUMM	ARY FOR	MORE D	ETAILS)			
					a check in t	he appropriat	boxes:		
			gs (1 full set ng and cemen			ologic Report e Analysis	DST Report Other:	Direction	al Survey
34. Therei	ny certify th	at the fore	oing and att	ached infor	mation is co	mpiete and co	wrect as determined f	rom all availal	ele records (see attached instructions)*
Name (Signat	please prin	Da	Darre Will	11 / (N	Moor	٤	Title E	nu. M 1/24/0	gr for Watera Waste
Title 1811	S.C Section	n 1001 and	i Title 43 II	S.C Section	na 1212 mai	ke it a crime !	for any nerson knowi	nelv and pilling	ully to make to any denorment or avenue of the United

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, fictitions or fraudulent statements or representations as to any matter within its jurisdiction.

OCD-ARTESIA Form 3160-5 UNITED STATES FORM APPROVED OM B No. 1004-0137 Expires: March 31, 2007 DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT** onth - Year 5. Lease Serial No. NW-0557371 MAR - 5 2007 SUNDRY NOTICES AND REPORTS ON WELL If Indian, Allottee or Tribe Name OCD - ARTESIA, NM Do not use this form for proposals to drill or to re-enter a abandoned well. Use Form 3160-3 (APD) for such proposals. 7. If Unit or CA/Agreement, Name and/or No. SUBMIT IN TRIPLICATE- Other instructions on reverse side. 1. Type of Well Oil Well Gas Well Other 8. Well Name and No. Wnw.3 2. Name of Operator NAVAJO REFINIG COMPANY API Well No. 30 - 015 - 26575 3a Address 3b. Phone No. (include area code) P.O. BOX 159, ARTESIA, NM 88211 10. Field and Pool, or Exploratory Area 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 11. County or Parish, State SI - T18S - R27E; 798' FROM THE SOUTH LINE AND 2250' FROM THE WEST LINE EDDY 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Acidize Production (Start/Resume) Deepen Water Short-Off Notice of Intent Alter Casing Well Integrity Fracture Treat Reclamation Casing Repair Other Subsequent Report New Construction Recomplete Change Plans Plug and Abandon Temporarily Ahandon NON-HAZARDOUS Final Abandonment Notice Convert to Injection ___Plug Back Water Disposal 13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.) THE PLUGGED AND ABONDONED WELL WAS AQUIRED FROM MEWBOURNE OIL COMPANY BY NAVAJO REFINING. NAVAJO RECOMPLETED THE WELL FOR INJECTING NON-HAZARDOUS WASTE WATER FROM THEIR REFINERY IN ARTESIA, NM. 10/1/06 - THE EXISTING PLUGS WERE DRILLED OUT TO THE TOP OF THE LINER PLUG AT 9022' AND THE EXISTING PERFORATIONS WERE SQUEEZED OFF WITH NEAT CEMENT AT 7959' TO 7102', 7262' TO 7278', AND FROM 7384' TO 7314'. 10/13/06 - RAN CBL/VDL AND TEMPERATURE SURVEY, PERFORATED INTERVAL FROM 7650' TO 8450' AND FROM 8540' TO 86201. 10/24/06 - A 4 1/2" 11.6 #/FT TUBING STRING WAS SET WITH A TENSION PACKER AT 7568' AND BOTTOM OF PACKER AT 7575'. 11/4/96 - PERFROMED AN INJECTION/FALLOFF TEST ON THE WELL AT 9 TO 10 BPM. 11/15/86 - MECHANICALLY INTEGRITY TEST WERE PERFORMED AND WITNESSED BY THE OCD. THE MECHANICALLY 11/15/96 - MECHANICALLY INTEGRITY TEST WERE I REPORTED IN AN ANNULUS PRESSURE TEST. SUBJECT TO LIKE I hereby certify that the foregoing is true and correct Name (Printed/Typed) Title 1/24 Date THIS SPACE FOR FEDERAL OR STATE OFFICE HEEPTED

Office

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 representations as to any matter within its jurisdiction.

2 8 2007

PETROLEUM ENGINEER

FEB

SEE ATTACHED FUR CONDITIONS OF APPROVAL

Conditions of approval, if any, are attached. Approval of this notice does not warrant or

certify that the applicant holds legal or equitable title to those rights in the subject lease

which would entitle the applicant to conduct operations thereon

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this

form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13 - Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or

present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well and date well site conditioned for final inspection looking to approval of the abandonment.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

This information is being collected to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer, (WO-630), Mail Stop 401 LS, 1849 C St., N.W., Washington D.C. 20240

SUNDRY NOTICE SPECIAL STIPULATIONS

- 1. Approval is granted for the water disposal method presented in the sundry subject to the following conditions:
- 2. The operator must provide a water analysis of the water to be injected, together with a copy of the disposal permit granted by the state.

**** 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.

Engineering can be reached at 505-706-2779 for any variances that might be necessary.

F Wright 2/28/07

Form 316 (April 20)-4 04)					TED STA		*****	•	£1.5		1		EODNA A	PPROVED	
	··,					ENT OF TI F LAND N			ſ				;	OMBNO.	1004-0137 arch 31, 2007	
b. Type	WE	LL CO	MPLE	TION C	RA	RECOMPL	ETIO	N REPO	RT AN	ID LOG		<u> </u>		e Serial No. - 0557371		
la Tvo	of Well	Toilv	va) [Gas We	ı ſ	Dry []	Other								e or Tribe Name	ī
b. Type	of Complet					Work Over	D~	pen 🛄	Plug Back	Dif	f. Res	vr, .	N/A		ement Name and No.	
	-60		Other						·				/ Our	ui CA Agio	ennen mane abu mo.	
Z. (VAIDE	or Operate	" NAV	JO RI	EFINING	CON	(PANY								Name and W-3	Well Na	
3. Addre	SS P.O. I	3OX 159,	ARTE	esia, nm	8821	1		3a P	hone No.	(include a	rea ce	xde)	9. AFI V	Vell No. 015 - 2657	75	•
4. Locat	ion of Well	(Report l	ocation	clearly and	in acc	cordance with	Feder	al requirem	enis)*					······	r Exploratory	•
At su	face 7	96' FRO	M TH	E SOUTH	LIN	E AND 2250	r FRO	M THE W	EST LE	NE		F	11 6	~ N W	D1 - (1	•
At top	prod. inte	val report	ed belov	7650' 8	ar ir	HE SAME I	LOCAT	TON AS A	BOVE				Surve	y or Arca	on Block and SI - T18S - R27E	
						SAME LO							12 Cour EDDY	ty or Parish	I3 State NM	
14. Date	Spudded			Date T.D.	Reach			16. Date	Complete				17. Eleva	tions (DF,)	RKB, RT, GL)*	•
	2/1990	m		01/29/1		n		.f	& A	Ready			3609			
l8. Total	•	iD 10,11 VD 10,11		İ	19. 91	ug Back T.D.		9822°		20. De	el die	ridge Plug S	es: MC TV	n	CMT 9051'-9022'	
21 Type				al Logs Ru	ı (Sul	bmit copy of		7916		22. Wa	s wel	cored?	/ No		CMT 9051'-9022'	,
CBL	VDL, MI	JLI-ARN	CAL	IPER, TE	MOP, 3	RADIOACI	TIVE T	RACER (2906)	Wa	s DS		/ No [Yes (Sub	mit report) Submit copy)	
23. Casin	g and Lin	er Record	(Repo	ort all stri	gs se	et in well)				1 1	CCHO	IBI SHIVEY!	[<u>A</u>](40		эмови сору)	
Hole Size	Size/Gra	wie Wt	(#/ft.)	Тор (М	D)	Bottom (MI)) Stap	c Cemento Depth		of Sks. & of Coment	S	lurry Vol. (HHL)	Cemen	t Top*	Amount Pulled	
17 1/2"	13 3/8 9 5/8"		5	SURF		400'	40	~		CLASS C			SURF		NONE	
12 1/4" 8 3/4"	7"		& 26	SURF		26 04 ' 9450'	26 94		1025	"H"	╁╴		SURF 966'		NONE	
6 1/4"	4 1/2"			9051'		10,119'	10	19'	175 (LASS H	$oxed{\Box}$		9051'-	TOL	NONE	
	 				-			 	 		╁					
	Record	G.+ (LOD)	LW. L	. D. d. 04	557			J. D. A. O. O.		D 1 0 P			15.4		T	
Size 4 1/2"	7567°	១៨ (MU)	756	a Depth (M 7	"	Size	Dd	ath Set (MD)	PACKET	Depen (IVII	"	Size	Depar	Set (MD)	Packer Depth (MD)	
25. Produc	ing Interva Formation			Тор		Bottom	26.	Perforati Perforate		1	Size	No	Holes	1 Y	Perf. Status	
A) CISC				7650*	8	45 0°	760	(0° - 8450°	120270	0.	5"	1580	110163	2 JSPF		
B) CAN C)	YON			854 6*	- 8	62 0°	854	10'- 862 0'		<u> a</u>	5"	160		2 JSPF	/ 6 0 °	
D)																
	Fractions, Tr Depth Interv		ement S	iqueezo, etc					Ausount =	nd Type of	Mari	nial				
7850* - 7	102'					4 14.8 PPG		CMT FO	PERF	SQZ ON	PRI	VIOUS P				
7262° - 7				····		M 14.8 PPG I 14.8 PPG										
10 D. 7	oblas For															
28. Produ Date First Produced	Test Date	House Tested	Test Produc	Oil tion BBL		G _M MCF	Water BBL	Oli Gr Cort.	ryity (Pl	Gas Gravit		Production	Method			
			-	>								NON-HA	ZAROUS C	Lass I wei	L	
Choke Size	Thg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL		Gas MCF	Water BBL	Gan/Oi Ratio		Well St	alių š	MY SAMP	G ON STAT	IK Ybeevo	AL TO INJECT	
28a Produ	{	rval B			1	L										
Date First Produced	Test Date	Hours Tested	Test Producti	ion BBL		Gas MCF	Water BBL	Oil Gra Corr. A	vity PI	Gas Gravity		Production	Method		······································	
Choke	The Pro-	Can		>				Gas/Oil				ì		Lass I wel		
Size	The Press. Flwg. Si	Ceg. Press.	24 Hr. Rate	BBL		G≥ T	Water BBL	Ratio	•	Well Sta	ROS			ACCE	IRTED FOR	RE
*(See insi	i	d spaces j	or addi	tional data	on pa	ge 2)				<u></u>	~	WAJTEN	un stat	1000	L40 ESTCT	
															FEB 28	2(1/17
														1 1	FFM 7 Q	CAA!

	ction - Iste			1	,	· · · · · · · · · · · · · · · · · · ·		·		······································
Date First Produced	Test Date	Hours Tested	Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method	
Choke Size	The Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Stams		
20 - Drod	uction - Int	ormi D			 		<u> </u>	-		
Date First	Test	Rours	Test	Oil	Gas	Water	Oit Consists	10	I D & A MALA	······································
Produced	Date	Tested	Production	BBL	МСР	BBL	Oil Gravity Corr. API	Gas Gravity	Production Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hy. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status		
•			ued for fuel, US CLASS			.1		<u> </u>		
								· · · · · · · · · · · · · · · · · · ·		
Show tests,	all import	ant zones	(Include Aquof parosity a	ind content:	s thereof: (time tool op	lored interval en, flowing a	s and all drill-stem ad shut-in pressures	31. Formati	ion (Log) Markers	
17		Тор	Bottom		Decori	ptions, Conte	nte etc		Name	Тор
rom	ation	100	DOTOR		E/CSCI)	puous, Counc		1	IVALLE	Meas. Depth
32. Additi	onal remarl	ks (include	plugging pro	cedure):						
REC EXIS SQU WAS	omplet Sting Pl Bezed o Set Wit	ed the UGS We OFF WITH THIA TEL	WELL FO RE DRILL I CEMEN	R INJECT ED OUT FAT 7050 CKER AT	TING NON TO THE T ' TO 7102' ' 7568' ANI	-HAZARD 'OP OF TH , 7262' TO ' D BOTTOM	OUS WASTE WA E LINER PLUG A 1278°, AND FROM	ATER FROM AT 9022' ANI 1 7304' TO 7:	MPANY BY NAVAJO REFIN THEIR REFINERY IN ART D THE EXISTING PERFOR, 314'. A 4 1/2" 11.4 #FT TUB WAS WITNESSED BY OCD	TESIA, NM. THE ATIONS WERE ING STRING
						·				
						e appropriate				
			gs (1 full set ng and cemen	- /		dogic Report e Analysis	DST Report Other:	Directions	d Survey	
34. Thereb	y certify th	at the fores	oing and att	ched infor	nation is cor	miete and co	ment as determined fo	mm all surilab	le records (see attached instruction	me/*
	please prin	~	Darre 	11 /	Moor	<u>e</u>	Title E	nu M	gr for Water,	•
		n 1001 and	1750b 43 11	SC Sertio	n 1212 mal	eit a crime f			pilly to make to any densement of	
THE TO U.		m toot all	11UC 43 U,	الانتحاد حسد	u iziz iiili	sen a compe i	CALABY DELSON KNOWI	neivana wild	DHV III MAKE IA ANV denstiment A	ransmore of the Whited

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.

INSTRUCTIONS

GENERAL: This form is designed for submitting a complete and correct well completion/recompletion report and log on all types of wells on Federal and Indian leases to a Federal agency, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal office.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, and all types electric), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal laws and regulations. All attachments should be listed on this form, see item 33.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal office for specific instructions.

ITEM 17: Indicate which reported elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

ITEM 23: Show how reported top(s) of cement were determined, i.e. circulated (CIR), or calculated (CAL), or cement bonding (CBL), or temperature survey (TS).

PRIVACY ACT

The Privacy Act of 1974 and the regulation in 43 CFR 2.48 (d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. et seq.; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is to be used to evaluate the actual operations performed in the drilling, completing and testing of a well on a Federal or Indian lease.

ROUTINE USES: (1) Evaluate the equipment and procedures used during the drilling and completing/recompleting of a well. (2) The review of geologic zones and formation encountered during drilling. (3) Analyze future applications to drill in light of data obtained and methods used. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this report and disclosure of the information is mandatory once a well drilled on a Federal or Indian lease is completed/recompleted.

The Paperwork Reduction Act of 1995 requires us to inform you that:

This information is being collected to allow evaluation of the technical, safety, and environmental factors involved with drilling and completing/recompleting wells on Federal and Indian oil and gas leases.

This information will be used to analyze operations and to compare equipment and procedures actually used with those proposed and approved.

Response to this request is mandatory only if the operator elects to initiate drilling and completing/recompleting operations on an oil and gas lease.

BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 60 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer, (WO-630), MS 401 LS, 1849 C Street, N.W., Washington, D.C. 20240.

Well Summary

Navajo Refining Company (Navajo) contracted Subsurface Technology, Inc. (Subsurface), to prepare an application for permit and to reenter a plugged and abandoned (P&A) oil and gas well. The Application for Permit to Drill or Reenter and the Sundry Notices and Reports on Wells was submitted to the Department of the Interior, Bureau of Land Management (BLM), on June 29, 2006 and approved. The Application for Permit to Drill, Re-enter, Deepen, Plug Back, or add a Zone was submitted to the State of New Mexico Oil Conservation Commission (OCD) on June 29, 2006 and approved.

Subsurface prepared an engineering plan to reenter the P&A'ed oil and gas well formally owned by Mewbourne Oil Company. The original well name was Caulk Bluff Federal #1 (API number 30-015-26575), and a Change of Operator application was submitted to the OCD on December 5, 2000 and approved under the well name of WDW-3. Under contract to Navajo, Subsurface commenced field operations on September 25, 2006. The existing location was cleared and prepared for reentry operations. An earthen lined reserve pit was dug to catch returns. All depths unless stated are referenced to rig floor at six feet to seven feet above ground level. The rig floor was moved from six feet to seven feet after drilling out the cast iron bridge plugs.

A workover rig and reverse unit was placed on location and the existing wellhead was removed. The first cast iron bridge plug (CIBP) at 7010 feet was drilled and the perforated interval from 7050 feet to 7102 feet was squeezed off with neat cement and successfully pressured tested to six hundred eighty pounds per square inch gauge pressure (680 psig). The second and third CIBP at 7190 feet and 7279 feet was drilled. There appeared to be ten feet of cement on top of the third CIBP. The perforated interval from 7262 feet to 7278 feet and from 7304 feet to 7314 feet was squeezed with neat cement. The squeezed interval was pressure tested to 920 psig and would not hold. A second cement squeeze was performed across the perforated interval from 7262 feet to 7278 feet and from 7304 feet to 7314. The interval was pressured tested to 630 psig and continued to lose pressure at a rate of two pounds per square inch every thirty minutes (2 psi/30 min). The fourth CIBP at 7595 feet was drilled and at 7838 feet a cement plug was encountered and drilled through. Cement was tagged twenty nine (29) feet above the top of the liner at 9022 feet. The hole was circulated clean and prepared for logging.

A Cement Bond Log (CBL), Variable Density Log (VDL), caliper log, and temperature survey were performed. The CBL/VDL showed that the top of the cement (TOC) behind the 7-inch casing was located 900 feet from the surface. The OCD was notified and approved the existing well condition. The casing was perforated from 7660 feet to 8450 feet and from 8540 feet to 8620 feet at 2-JSPF on sixty degree (60°) phasing.

A packer was set at 7546 feet with 2 7/8-inch PH-6 tubing, the well was swabbed back and samples of the formation fluid were recovered. It was estimated that two hundred twenty six barrels (226 bbls) of formation fluid was returned to the surface. A pressure test on the annulus between the 7-inch and 2 7/8-inch was performed at 660 psig with the annulus losing pressure at a rate of 8 psi/hr.

An injection test was performed on the well down the 2 7/8-inch tubing with the annulus open to the bottom of the well. The open annulus will allow for the calculation of the bottom hole pressure while pumping down the 2 7/8-inch tubing with out the influence of tubing friction pressure on the bottom hole calculations. The injection rates were from two barrels per minute (2 bpm) to ten barrels per minute (10 bpm). From the data collected during the injection test it appears that the well will be able to accept an injection rate up to 10 bpm at the permitted pressure of 1550 psig with 4 1/2-inch, 11.6 pound per foot (11.6 lb/ft) tubing in the wellbore.

At the request of the OCD, Subsurface went back into the wellbore with a retrievable bridge plug (RBP) to test the casing and isolate any leaks to within 1000 feet. The RBP was set at 7550 feet and the packer was set at 6985 feet to isolate the squeezed interval from 7050 feet to 7314 feet. The squeezed interval was pressure tested to 490 psig and the annulus to 632 psig. The squeezed interval was losing pressure at a rate of 6 psi/hr and the annulus was gaining pressure due to thermal affects. The RBP was moved up the wellbore to 1255 feet and casing pressure tested to 569 psig. The casing above 1255 feet was losing pressure at a rate of 2 psi/hr. The casing leaks were isolated to the squeezed interval from 7050 feet to 7314 feet and in the interval from surface to 1255 feet. The OCD was called and approved the 300PSI sealing application to stop the casing leaks across the two intervals.

The 4 1/2-inch tubing was run into the wellbore and the Arrow X-1 packer was set at 7575.73 feet with 37,000 lbs of tension. Prior to running the 4 1/2-inch tubing a new Superior hanging spool was installed. Prior to setting the tubing packer, the annulus between the 4 1/2-inch tubing and the 7-inch casing was filled with inhibited brine, with the 300psi sealant across the squeezed perforations and across the upper section of the 7-inch casing. Once the packer was set and casing hung off in the spool a new Superior wellhead was installed and the P-seals were pressure tested to 3000 psig. After the wellhead was assembled the annulus was squeezed at 545 psig for four hours (4 hrs) as specified by the sealant manufacture representative on site. The annulus was then pressure tested to 480 psig overnight with no pressure loss. Workover rig was disassembled and moved off location with all associated equipment.

A 12 hr pump in and falloff test was performed down the 4 1/2-inch tubing. To maintain a surface injection pressure that was below the permitted pressure of 1550 psi the injection rate was lowered to 9 bpm at the end of the pump in procedure. The BHP gauge was placed at 8630 feet for 14 hrs to monitor BHP, when the gauge was pulled five minute (5 min) gradient stops were made every 1000 feet with the first stop at 7000 feet. The analysis of the data showed interference from the adjacent injection wells, which skewed the results for determination of the skin and possibly the permeability. The equipment used to perform the falloff testing was moved off location to prepare for mechanical integrity testing (MIT).

The MIT was performed and witnessed by the OCD. The MIT consisted of an annulus pressure test, and a radioactive tracer survey. The temperature survey was performed during the CBL/VDL logging event and will be used as a baseline for any future temperature surveys. The annulus pressure test was performed at 530 psia and lost 2.5 psi over a one hour period, which was within the OCD requirements of five percent (5%)

over a 30 min time interval. The radioactive tracer survey showed no signs of fluid flow out of the permitted interval above 7650 feet. The OCD witnessed the annular pressure test and the first half of the radioactive tracer survey.

The annulus monitoring system was installed and tested. The well was turned over to Navajo for injection.



R/A TRACER LOG INTERPRETATION

11/27/2006

PLANT: NAVAJO REFINING CO. C/O: SUBSURFACE TECHNOLOGY

WELL NAME: CHALK BLUFF FEDERAL # 1 WDW # 3

RE: Radioactive Tubing & Packer Survey ran on 11/18/2006

A Pre Base Log was run from 9020' to 7350' to detect and record background gamma counts.

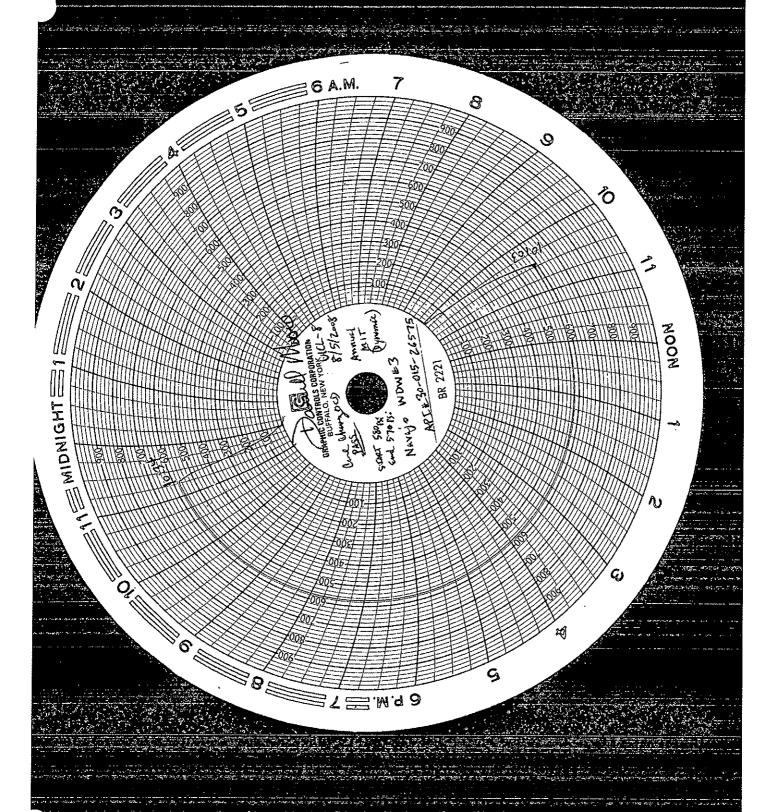
Iodine 131 was then ejected at a depth of 7375' and pumped down the tubing and into the permitted interval. Overlapping logging passes tracked the R/A tracer material as it moved down in the wellbore. The R/A material was seen traveling down the tubing, past the packer, and exiting the permitted injection interval.

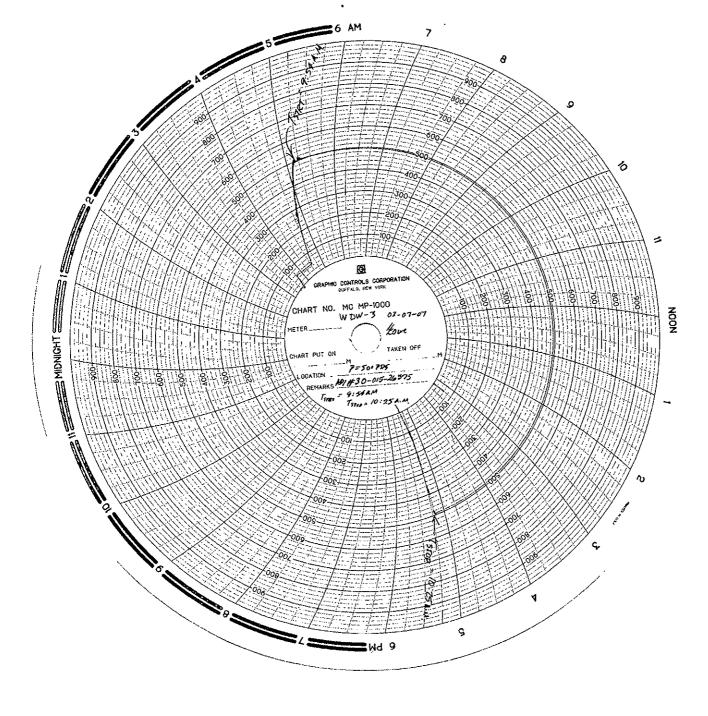
The flow profile log was then repeated and this survey also showed R/A material going out into the permitted interval.

Two Stationary Time Drive surveys were run with the tool at 7640'. No indications of upward migration were recorded.

A Post Base log was then run from 9016' to 7342' and noted that all R/A material was flushed out of the wellbore into the permitted interval.

John Croce



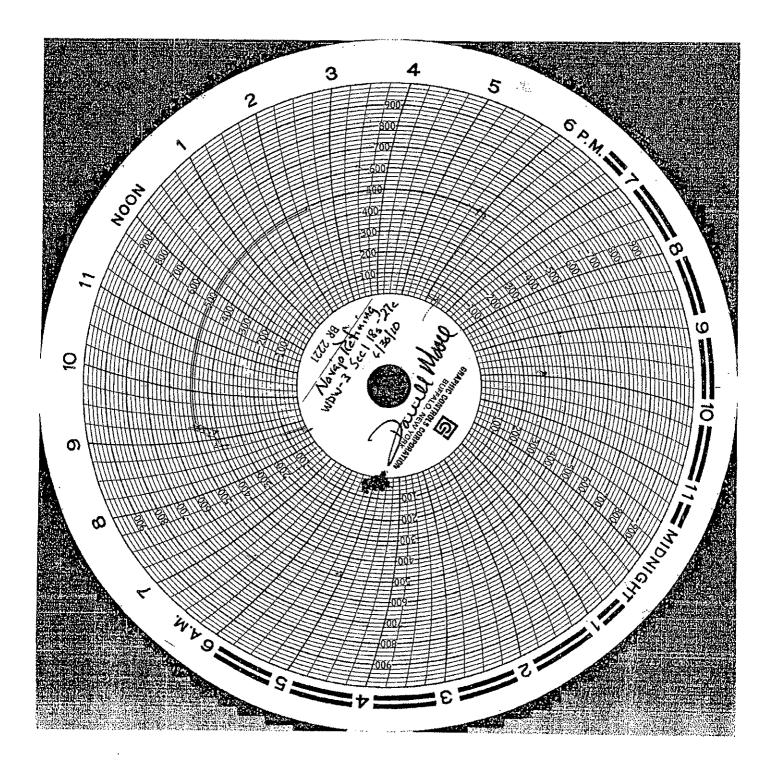


Oil Conservation Division, Environmental Bureau C/O: Carl Chavez 1220 South St. Francis Drive Santa Fe, New Mexico 87505

BRADENHEAD TEST REPORT

(Submit 2 copies to above address)

Date of 7	est June 30	, 2010	Operator_N	lavajo Refining	API #30-0 15-26	5575
• •	Name WDW Injectus (Shut-In or	ting		Location: Unit 0		- ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
OPEN	BRADENHEAI	AND INTERME	DIATE TO	ATMOSPHERE IND	IVIDUALLY FOR 15	MINUTES EACH
TIME	BRADENHEAD	PRESSURES: INTERMEDIATE	CASING	-	BRADENHEAD FLOWED	INTERMEDIATE FLOWED
5 minutes	0	0		Steady Flow	N/A	N/A
10 minutes	N/A	N/A		Surges	N/A	N/A
15 minutes	N/A	N/A		_ Down to Nothi	ng immediately	immediately
20 minutes	N/A	N/A		Nothing	x	X
25 minutes	n/a	N/A		Gas	N/A	N/A
30 minutes	N/A	N/A		_ Gas & Water_	N/A	N/A
				Water	N/A	N/A
If bradenh	ead flowed water	r, check all of the de	scriptions (hat apply below:		
Cì	EARFI	RESHSAL	TY	SULFUR BLAC	CK	
5 MINUTI	E SHUT-IN B	RADENHEAD 0		INTERMEDIATE 0	······	
REMARKS		urface and int	ermediat	e bradenheads wer	re onened one of	s time Roth
				he vqalve (from h		
		No pressure.				
By Dar	rell Moore	Daull	Moore	Witness		
	osition)	Nater & Waste	Navajo 1	Refining		
E-mail addı	essdarrell.mc	ore@hollycorp.	соп			



Chavez, Carl J, EMNRD

From:

Moore, Darrell [Darrell.Moore@hollycorp.com]

Sent:

Friday, March 05, 2010 8:51 AM

To: Subject: Chavez, Carl J, EMNRD WDW-3 Qtrl MIT

Carl

Attached, please find the chart for the MIT we did on our WDW-3 on February 24, 2010. We also opened the did a bradenhead test and there was no sustained pressure. There was a slight puff but it dissipated quickly and can be attributed to temperature changes.

If there are any questions concerning this submission, please call me at 575-746-5281.

Darrell Moore

Environmental Manager for Water and Waste

Navajo Refining Company, LLC

Phone Number 575-746-5281

Cell Number 575-703-5058

Fax Number 575-746-5451

CONFIDENTIAL

This e-mail message and all corresponding e-mail messages, including all attachments, are intended solely for the individual(s) named above. They contain confidential and/or proprietary information. Do not forward, copy, distribute or otherwise relay the messages or their content to any individual without first contacting the sender of this message. If you have received this e-mail message in error, do not read, forward, copy or distribute it or any of its content to anyone. In addition, please notify the sender that you have received this message immediately by return e-mail and delete it.

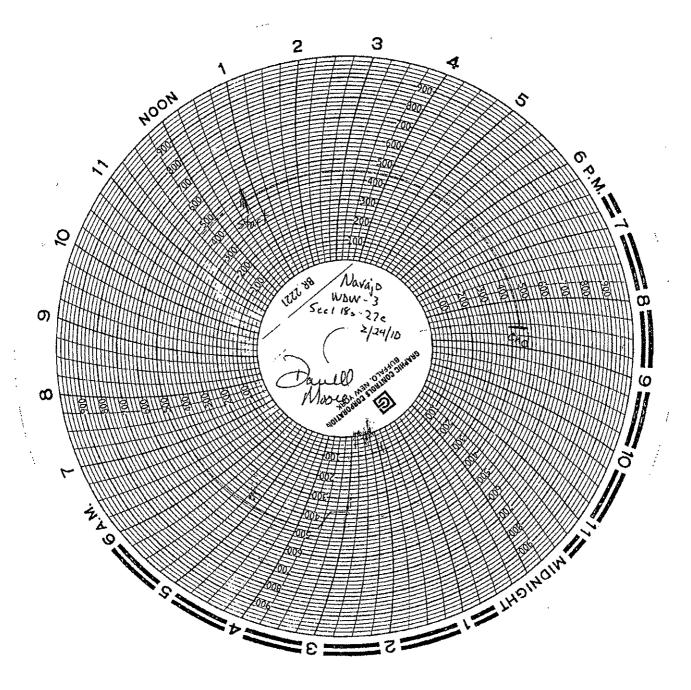


Please consider the environment before printing this e-mail.

CONFIDENTIALITY NOTICE: This e-mail, and any attachments, may contain information that is privileged, proprietary and/or confidential. If you

received this message in error, please advise the sender immediately by reply e-mail and do not retain any paper or electronic copies of this message or any

attachments. Unless expressly stated, nothing contained in this message should be construed as a digital or electronic signature or a commitment to a binding agreement.



Chavez, Carl J, EMNRD

From: Sent:

Chavez, Carl J, EMNRD

Tuesday, July 06, 2010 9:04 AM

To: Subject: 'Moore, Darrell' RE: Sewer Testing

Darrell:

Thanks for the notification.

Also, the OCD needs Navajo to complete the quarterly Bradenhead information on the form provided to you last week for our records. Let me know if you have any questions. Staff in Artesia questioned the 30 minutes in the form, and I determine that Navajo just needs to use the form to document compliance with our quarterly Bradenhead testing requirement for WDW-3. The MITs for Class I Wells need to be completed by 9/30/2010 along with Annual Fall-Off Test. OCD can use the MIT pressure chart for WDW-3 to satisfy the MIT requirement this season.

Please contact me if you have questions. Thanks.

Carl J. Chavez, CHMM

New Mexico Energy, Minerals & Natural Resources Dept.

Oil Conservation Division, Environmental Bureau

1220 South St. Francis Dr., Santa Fe, New Mexico 87505

Office: (505) 476-3490 Fax: (505) 476-3462

E-mail: CarlJ.Chavez@state.nm.us

Website: http://www.emnrd.state.nm.us/ocd/index.htm (Pollution Prevention Guidance is under "Publications")

From: Moore, Darrell [mailto:Darrell.Moore@hollycorp.com]

Sent: Tuesday, July 06, 2010 7:24 AM

To: Chavez, Carl J, EMNRD Subject: Sewer Testing

Carl

We will be testing sewers in the Vacuum Unit at the Artesia Refinery on Friday July 9, 2010 starting at 8 am. If OCD would like to witness let me know.

Darrell Moore

Environmental Manager for Water and Waste Navajo Refining Company, LLC Phone Number 575-746-5281 Cell Number 575-703-5058 Fax Number 575-746-5451

CONFIDENTIAL

This e-mail message and all corresponding e-mail messages, including all attachments, are intended solely for the individual(s) named above. They contain confidential and/or proprietary information. Do not forward, copy, distribute or otherwise relay the messages or their content to any individual without first contacting the sender of this message. If you have received this e-mail message in error, do not read, forward, copy or distribute it or any of its content to anyone. In addition, please notify the sender that you have received this message immediately by return e-mail and delete it.



Please consider the environment before printing this e-mail.

CONFIDENTIALITY NOTICE: This e-mail, and any attachments, may contain information that is privileged, proprietary and/or confidential. If you

received this message in error, please advise the sender immediately by reply e-mail and do not retain any paper or electronic copies of this message or any

attachments. Unless expressly stated, nothing contained in this message should be construed as a digital or lectronic signature or a commitment to a binding agreement.

Oil Conservation Division, Environmental Bureau C/O: Carl Chavez 1220 South St. Francis Drive Santa Fe, New Mexico 87505

BRADENHEAD TEST REPORT

(Submit 2 copies to above address)

Date of Test June 3	0; 2010 C	perator_Na	avajo Refining	API #30-0 15-26	6575
Property Name WDW Inje Well Status (Shut In or	cting		Location: Unit 0 S		
OPEN BRADENHEA	D AND INTERMEI	DIATE TO	ATMOSPHERE INDIN	VIDUALLY FOR 15	MINUTES EACH
TIME BRADENHEAD	PRESSURES: INTERMEDIATE	CASING		BRADENHEAD FLOWED	INTERMEDIATE FLOWED
5 minutes 0	0	! :	Steady Flow	N/A	N/A
10 minutes N/A	N/A		Surges	N/A	N/A
15 minutes N/A	N/A		Down to Nothin	g <u>immediately</u>	immediately
20 minutes N/A	N/A		Nothing	X	×
25 minutes N/A	N/A		Gas	N/A	N/A
30 minutes N/A	N/A		Gas & Water	N/A	N/A
			Water	N/A	N/A
If bradenhead flowed water	er, check all of the de	scriptions tl	hat apply below:		
CLEARF	RESH SALT	TY	SULFUR BLACK	.	
5 MINUTE SHUT-IN E	BRADENHEAD 0	<u> </u>	INTERMEDIATE 0		
REMARKS: Both the	surface and inte	ermediate	bradenheads were	onenad one at	a tima Roth
			ne vgalve (from he		
	No pressure.	pening cr	ie valve (from ne	sat barra-up) ai	nd then nothing.
	NO PIESGUIE.		· · · · · · · · · · · · · · · · · · ·		
By Darrell Moore	100/	Dooce	Witness		· · · · · · · · · · · · · · · · · · ·
	Water & Waste		***************************************		
E-mail address darrell.m	oore@hollycorp.	com			

Chavez, Carl J, EMNRD

From:

Moore, Darrell [Darrell.Moore@hollycorp.com]

Sent: Wednesday, June 30, 2010 1:47 PM

To:

Chavez, Carl J, EMNRD; Dade, Randy, EMNRD

Subject: F Attachments: W

WDW-3.pdf

Gentlemen,

Attached, please find the quarterly MIT for Navajo's WDW-3 Injection well located in Sec 1, 18 south 27 east. If there are any questions concerning this submission, please call me at 575-746-5281.

From: Hernandez, Carrie

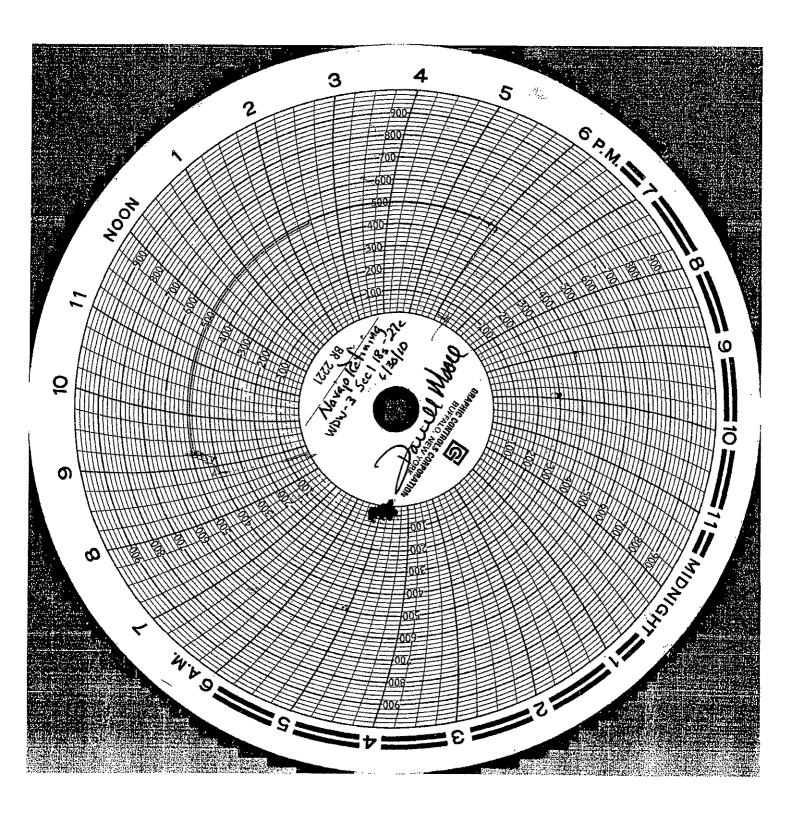
Sent: Wednesday, June 30, 2010 1:44 PM

To: Moore, Darrell

Subject:

Carrie Hernandez
Environmental Administrative Assistant
Navajo Refining Co. LLC
Direct Line 575-748-6733
Direct Fax 575-746-5451
Life is a Journey. Roll down the Windows and Enjoy the Breeze

CONFIDENTIALITY NOTICE: This e-mail, and any attachments, may contain information that is privileged, proprietary and/or confidential. If you received this message in error, please advise the sender immediately by reply e-mail and do not retain any paper or electronic copies of this message or any attachments. Unless expressly stated, nothing contained in this message should be construed as a digital or electronic signature or a commitment to a binding agreement.



Submit I Copy To Approp Office		State of New Mo		•	Form C-103
<u>District I</u> – (575) 393-6161 1625 N. French Dr., Hobb		gy, Minerals and Nati	ıral Resources	WELL API NO.	Revised August 1, 2011
District II - (575) 748-128	3	. CONSERVATION	IDIVISION	30-015-26575	
811 S. First St., Artesia, N District III - (505) 334-61		1220 South St. Fra		5. Indicate Type of	
1000 Rio Brazos Rd., Azte	c, NM 87410	Santa Fe, NM 8		STATE STATE	
<u>District IV</u> – (505) 476-34- 1220 S. St. Francis Dr., Sa 87505		,	, 505	6. State Oil & Gas NM-0557371	Lease No.
(DO NOT USE THIS FOR DIFFERENT RESERVOIL	NDRY NOTICES AND IM FOR PROPOSALS TO DR R. USE "APPLICATION FOR	ILL OR TO DEEPEN OR PL	UG BACK TO A	7. Lease Name or U Gaines WDW-3	Jnit Agreement Name
PROPOSALS.) 1. Type of Well: Oil	Well Gas Well	Other Injection W	/ell	8. Well Number W	DW-3
2. Name of Operator				9. OGRID Number	•
Navajo Refining Co 3. Address of Operat				10 Pool name or U	Vildcat: Navajo Permo-
	Artesia, New Mexico 8	8211		Penn	viideat. Navajo Permo-
4. Well Location				·	
Unit Letter_	<u>N</u> : 790	feet from the _ <u>South</u>	***************************************		
Section 0		Township 18S	Range 27E	NMPM	County Eddy
		ition (Show whether DR L, ' RKB	, KKB, KI, GR, etc.		
,	WHEELE TO SHOW THE SH		······		at a sales table a series
1	2. Check Appropria	te Box to Indicate N	lature of Notice,	Report or Other D	D ata
NOT	ICE OF INTENTIO	N TO:	l sub	SEQUENT REP	ORT OF:
PERFORM REMEDIA		ID ABANDON 🔲	REMEDIAL WOR		ALTERING CASING
TEMPORARILY ABAI			COMMENCE DR		P AND A
PULL OR ALTER CAS DOWNHOLE COMMI		E COMPL	CASING/CEMEN	TJOB [
	_	COT	OTHER:	,	
OTHER: PERFORM I	LUEGGOUG LALCOLL II	LO I	LOIDED.		1 1
OTHER: PERFORM I					<u> </u>
13. Describe prop of starting any		ions.' (Clearly state all	pertinent details, an	d give pertinent dates, mpletions: Attach we	, including estimated date
13. Describe prop of starting any proposed com	osed or completed operaty proposed work). SEE R	ions.' (Clearly state all ULE 19.15.7.14 NMA	pertinent details, an	mpletions: Attach we	, including estimated date Ilbore diagram of
13. Describe prop of starting any proposed com December 12 three wells. December 13.	osed or completed operate proposed work). SEE Repletion or recompletion. 2011 –Install bottomhol 2011 – Continue injection	ions. (Clearly state all ULE 19.15.7.14 NMA) e gauges into WDW-1, on into all three wells.	pertinent details, an C. For Multiple Co WDW-2, and WDV	mpletions: Attach we W-3 by 11:45am. Con	, including estimated date Ilbore diagram of ntinue injection into all
13. Describe prop of starting any proposed com December 12 three wells. December 13 December 14 established for December 15.	osed or completed operate proposed work). SEE Repletion or recompletion.	cions. (Clearly state all ULE 19.15.7.14 NMA) e gauges into WDW-1, on into all three wells. offset wells WDW-1 are a 30 hour injection properties.	pertinent details, and C. For Multiple Co WDW-2, and WDW and WDW-2 will be cried. Do not excee	mpletions: Attach we W-3 by 11:45am. Con shut-in. A constant in d 1000 psig wellhead	nincluding estimated date allbore diagram of attinue injection into all injection rate will be pressure.
13. Describe prop of starting any proposed com December 12. three wells. December 13. December 14. established for December 15. in.	osed or completed operate proposed work). SEE Repletion or recompletion. 2011 – Install bottomhol 2011 – Continue injection, 2011 – At 12:15pm, the WDW-3 and continue for 2011 – At 7:00pm, WD	cions. (Clearly state all ULE 19.15.7.14 NMA) e gauges into WDW-1, on into all three wells. offset wells WDW-1 are a 30 hour injection pow-3 will be shut in for	pertinent details, and C. For Multiple Co WDW-2, and WDW and WDW-2 will be beriod. Do not exceed a 30-hour falloff per	mpletions: Attach we W-3 by 11:45am. Con shut-in. A constant in d 1000 psig wellhead riod. WDW-1 and W	nincluding estimated date allbore diagram of the stinue injection into all injection rate will be pressure. DW-2 will remain shut-
13. Describe prop of starting any proposed com December 12. three wells. December 13. December 14. established for December 15. in. December 16.	osed or completed operate proposed work). SEE Repletion or recompletion. 2011 – Install bottomhol 2011 – Continue injection, 2011 – At 12:15pm, the rework work with the result of the recompletion.	cions. (Clearly state all ULE 19.15.7.14 NMA) e gauges into WDW-1, on into all three wells. offset wells WDW-1 are a 30 hour injection pow-3 will be shut in for will continue to be shut it	pertinent details, and C. For Multiple Co WDW-2, and WDW and WDW-2 will be eriod. Do not exceed a 30-hour falloff pe	mpletions: Attach we W-3 by 11:45am. Con shut-in. A constant in d 1000 psig wellhead riod. WDW-1 and W falloff pressure in all	nincluding estimated date allbore diagram of the stinue injection into all injection rate will be pressure. DW-2 will remain shutthree wells.
13. Describe prop of starting any proposed com December 12. three wells. December 13. December 14. established for December 15. in. December 16. December 17. hole very slow	osed or completed operator proposed work). SEE Repletion or recompletion. 2011 – Install bottomhol 2011 – Continue injection. 2011 – At 12:15pm, the rewell of WDW-3 and continue for 2011 – At 7:00pm, WD 2011 – At 7:00am, acquirly, making 7-minute grady, making 7-minute grady.	e gauges into WDW-1, on into all three wells. offset wells WDW-1 aror a 30 hour injection pow-3 will be shut in for will continue to be shut if ire downhole pressure glient stops while comin	pertinent details, and C. For Multiple Co WDW-2, and WDW and WDW-2 will be ceriod. Do not exceed a 30-hour falloff per in while monitoring gauges from all three gout of WDW-3 events.	mpletions: Attach we W-3 by 11:45am. Con shut-in. A constant in d 1000 psig wellhead priod. WDW-1 and William falloff pressure in all we wells. Tag bottom overy 1000 feet (7000 f	nincluding estimated date allbore diagram of the stinue injection into all injection rate will be pressure. DW-2 will remain shutthree wells. of fill and come out of the food of the stinue of the stinue injection into all injection rate will be pressure.
13. Describe prop of starting any proposed com December 12. three wells. December 14. established for December 15. in. December 16. December 17. hole very slow ft, 3000 ft, 200	osed or completed operator proposed work). SEE Repletion or recompletion. 2011 – Install bottomhol 2011 – Continue injection 2011 – At 12:15pm, the rewell of WDW-3 and continue for 2011 – At 7:00pm, WD 2011 – All three wells well of 2011 – At 7:00am, acquirely, making 7-minute grad of ft, 1000 ft, surface). Reference of the complete well of the continue of the	e gauges into WDW-1, on into all three wells. offset wells WDW-1 aror a 30 hour injection pow-3 will be shut in for will continue to be shut if ire downhole pressure galient stops while cominum in hole with a temper.	pertinent details, and C. For Multiple Co WDW-2, and WDW and WDW-2 will be ceriod. Do not exceed a 30-hour falloff per in while monitoring gauges from all three gout of WDW-3 events.	mpletions: Attach we W-3 by 11:45am. Con shut-in. A constant in d 1000 psig wellhead priod. WDW-1 and William falloff pressure in all we wells. Tag bottom overy 1000 feet (7000 f	nincluding estimated date allbore diagram of the stinue injection into all injection rate will be pressure. DW-2 will remain shutthree wells. of fill and come out of
13. Describe prop of starting any proposed com December 12. three wells. December 14. established for December 15. in. December 16. December 17. hole very slow ft, 3000 ft, 200	osed or completed operator proposed work). SEE Repletion or recompletion. 2011 – Install bottomhol 2011 – Continue injection. 2011 – At 12:15pm, the rewell of WDW-3 and continue for 2011 – At 7:00pm, WD 2011 – At 7:00am, acquirly, making 7-minute grady, making 7-minute grady.	e gauges into WDW-1, on into all three wells. offset wells WDW-1 aror a 30 hour injection pow-3 will be shut in for will continue to be shut if ire downhole pressure galient stops while cominum in hole with a temper.	pertinent details, and C. For Multiple Co WDW-2, and WDW and WDW-2 will be ceriod. Do not exceed a 30-hour falloff per in while monitoring gauges from all three gout of WDW-3 events.	mpletions: Attach we W-3 by 11:45am. Con shut-in. A constant in d 1000 psig wellhead priod. WDW-1 and William falloff pressure in all we wells. Tag bottom overy 1000 feet (7000 f	nincluding estimated date allbore diagram of the stinue injection into all injection rate will be pressure. DW-2 will remain shutthree wells. of fill and come out of the food of the stinue of the stinue injection into all injection rate will be pressure.
13. Describe prop of starting any proposed com December 12. three wells. December 14. established for December 15. in. December 16. December 17. hole very slow ft, 3000 ft, 200	osed or completed operator proposed work). SEE Repletion or recompletion. 2011 – Install bottomhol 2011 – Continue injection 2011 – At 12:15pm, the rewell of WDW-3 and continue for 2011 – At 7:00pm, WD 2011 – All three wells well of 2011 – At 7:00am, acquirely, making 7-minute grad of ft, 1000 ft, surface). Reference of the complete well of the continue of the	e gauges into WDW-1, on into all three wells. offset wells WDW-1 aror a 30 hour injection pow-3 will be shut in for will continue to be shut if ire downhole pressure galient stops while cominum in hole with a temper.	pertinent details, and C. For Multiple Co WDW-2, and WDW and WDW-2 will be ceriod. Do not exceed a 30-hour falloff per in while monitoring gauges from all three gout of WDW-3 events.	mpletions: Attach we W-3 by 11:45am. Con shut-in. A constant in d 1000 psig wellhead priod. WDW-1 and William falloff pressure in all we wells. Tag bottom overy 1000 feet (7000 f	nincluding estimated date allbore diagram of the stinue injection into all injection rate will be pressure. DW-2 will remain shutthree wells. of fill and come out of the food of the stinue of the stinue injection into all injection rate will be pressure.
13. Describe prop of starting any proposed com December 12. three wells. December 14. established for December 15. in. December 16. December 17. hole very slow ft, 3000 ft, 200	osed or completed operator proposed work). SEE Repletion or recompletion. 2011 – Install bottomhol 2011 – Continue injection 2011 – At 12:15pm, the rewell of WDW-3 and continue for 2011 – At 7:00pm, WD 2011 – All three wells well of 2011 – At 7:00am, acquirely, making 7-minute grad of ft, 1000 ft, surface). Reference of the complete well of the continue of the	e gauges into WDW-1, on into all three wells. offset wells WDW-1 aror a 30 hour injection pow-3 will be shut in for will continue to be shut if ire downhole pressure galient stops while cominum in hole with a temper.	pertinent details, and C. For Multiple Co WDW-2, and WDW and WDW-2 will be ceriod. Do not exceed a 30-hour falloff per in while monitoring gauges from all three gout of WDW-3 events.	mpletions: Attach we W-3 by 11:45am. Con shut-in. A constant in d 1000 psig wellhead priod. WDW-1 and William falloff pressure in all we wells. Tag bottom overy 1000 feet (7000 f	nincluding estimated date allbore diagram of the stinue injection into all injection rate will be pressure. DW-2 will remain shutthree wells. of fill and come out of the food of the stinue of the stinue injection into all injection rate will be pressure.
13. Describe prop of starting any proposed com December 12. three wells. December 13. December 14. established for December 15. in. December 16. December 17. hole very slow ft, 3000 ft, 200	osed or completed operator proposed work). SEE Repletion or recompletion. 2011 – Install bottomhol 2011 – Continue injection 2011 – At 12:15pm, the rewell of WDW-3 and continue for 2011 – At 7:00pm, WD 2011 – All three wells well of 2011 – At 7:00am, acquirly, making 7-minute grad of ft, 1000 ft, surface). Reference of the complete well of the continue of the	e gauges into WDW-1, on into all three wells. offset wells WDW-1 aror a 30 hour injection pow-3 will be shut in for will continue to be shut if ire downhole pressure galient stops while cominum in hole with a temper.	pertinent details, and C. For Multiple Co WDW-2, and WDW and WDW-2 will be ceriod. Do not exceed a 30-hour falloff per in while monitoring gauges from all three gout of WDW-3 events.	mpletions: Attach we W-3 by 11:45am. Con shut-in. A constant in d 1000 psig wellhead priod. WDW-1 and William falloff pressure in all we wells. Tag bottom overy 1000 feet (7000 f	nincluding estimated date allbore diagram of the stinue injection into all injection rate will be pressure. DW-2 will remain shutthree wells. of fill and come out of the food of the stinue of the stinue injection into all injection rate will be pressure.
13. Describe prop of starting any proposed com December 12. three wells. December 14. established for December 15. in. December 16. December 17. hole very slow ft, 3000 ft, 200	osed or completed operator proposed work). SEE Repletion or recompletion. 2011 – Install bottomhol 2011 – Continue injection 2011 – At 12:15pm, the rewell of WDW-3 and continue for 2011 – At 7:00pm, WD 2011 – All three wells well of 2011 – At 7:00am, acquirly, making 7-minute grad of ft, 1000 ft, surface). Reference of the complete well of the continue of the	e gauges into WDW-1, on into all three wells. offset wells WDW-1 aror a 30 hour injection pow-3 will be shut in for will continue to be shut if ire downhole pressure galient stops while cominum in hole with a temper.	pertinent details, and C. For Multiple Co WDW-2, and WDW and WDW-2 will be ceriod. Do not exceed a 30-hour falloff per in while monitoring gauges from all three gout of WDW-3 events.	mpletions: Attach we W-3 by 11:45am. Con shut-in. A constant in d 1000 psig wellhead priod. WDW-1 and William falloff pressure in all we wells. Tag bottom overy 1000 feet (7000 f	nincluding estimated date allbore diagram of the stinue injection into all injection rate will be pressure. DW-2 will remain shutthree wells. of fill and come out of the food of the stinue of the stinue injection into all injection rate will be pressure.
13. Describe prop of starting any proposed com December 12. three wells. December 14. established for December 15. in. December 16. December 17. hole very slow ft, 3000 ft, 200	osed or completed operator proposed work). SEE Repletion or recompletion. 2011 – Install bottomhol 2011 – Continue injection 2011 – At 12:15pm, the rewell of WDW-3 and continue for 2011 – At 7:00pm, WD 2011 – All three wells well of 2011 – At 7:00am, acquirly, making 7-minute grad of ft, 1000 ft, surface). Reference of the complete well of the continue of the	e gauges into WDW-1, on into all three wells. offset wells WDW-1 aror a 30 hour injection pow-3 will be shut in for will continue to be shut if ire downhole pressure galient stops while cominum in hole with a temper.	pertinent details, and C. For Multiple Co WDW-2, and WDW and WDW-2 will be ceriod. Do not exceed a 30-hour falloff per in while monitoring gauges from all three gout of WDW-3 events.	mpletions: Attach we W-3 by 11:45am. Con shut-in. A constant in d 1000 psig wellhead priod. WDW-1 and William falloff pressure in all we wells. Tag bottom overy 1000 feet (7000 f	nincluding estimated date allbore diagram of the stinue injection into all injection rate will be pressure. DW-2 will remain shutthree wells. of fill and come out of the food of the stinue of the stinue injection into all injection rate will be pressure.
13. Describe prop of starting any proposed com December 12. three wells. December 13. December 14. established for December 15. in. December 16. December 17. hole very slow ft, 3000 ft, 200	osed or completed operator proposed work). SEE Repletion or recompletion. 2011 – Install bottomhol 2011 – Continue injection 2011 – At 12:15pm, the rewell of WDW-3 and continue for 2011 – At 7:00pm, WD 2011 – All three wells well of 2011 – At 7:00am, acquirly, making 7-minute grad of ft, 1000 ft, surface). Reference of the complete well of the continue of the	e gauges into WDW-1, on into all three wells. offset wells WDW-1 aror a 30 hour injection pow-3 will be shut in for will continue to be shut if ire downhole pressure galient stops while cominum in hole with a temper.	pertinent details, and C. For Multiple Co WDW-2, and WDW and WDW-2 will be ceriod. Do not exceed a 30-hour falloff per in while monitoring gauges from all three gout of WDW-3 events.	mpletions: Attach we W-3 by 11:45am. Con shut-in. A constant in d 1000 psig wellhead priod. WDW-1 and William falloff pressure in all we wells. Tag bottom overy 1000 feet (7000 f	nincluding estimated date allbore diagram of the stinue injection into all injection rate will be pressure. DW-2 will remain shutthree wells. of fill and come out of the food of the stinue of the stinue injection into all injection rate will be pressure.
13. Describe prop of starting any proposed com December 12. three wells. December 14. established for December 15. in. December 16. December 17. hole very slow ft, 3000 ft, 200	osed or completed operator proposed work). SEE Repletion or recompletion. 2011 – Install bottomhol 2011 – Continue injection 2011 – At 12:15pm, the rewell of WDW-3 and continue for 2011 – At 7:00pm, WD 2011 – All three wells well of 2011 – At 7:00am, acquirly, making 7-minute grad of ft, 1000 ft, surface). Reference of the complete well of the continue of the	e gauges into WDW-1, on into all three wells. offset wells WDW-1 aror a 30 hour injection pow-3 will be shut in for will continue to be shut if ire downhole pressure galient stops while cominum in hole with a temper.	pertinent details, and C. For Multiple Co WDW-2, and WDW and WDW-2 will be ceriod. Do not exceed a 30-hour falloff per in while monitoring gauges from all three gout of WDW-3 events.	mpletions: Attach we W-3 by 11:45am. Con shut-in. A constant in d 1000 psig wellhead priod. WDW-1 and William falloff pressure in all we wells. Tag bottom overy 1000 feet (7000 f	nincluding estimated date allbore diagram of the stinue injection into all injection rate will be pressure. DW-2 will remain shutthree wells. of fill and come out of the food of the stinue of the stinue injection into all injection rate will be pressure.
13. Describe prop of starting any proposed com December 12. three wells. December 14. established for December 15. in. December 16. December 17. hole very slow ft, 3000 ft, 200	osed or completed operator proposed work). SEE Repletion or recompletion. 2011 – Install bottomhol 2011 – Continue injection 2011 – At 12:15pm, the rewell of WDW-3 and continue for 2011 – At 7:00pm, WD 2011 – All three wells well of 2011 – At 7:00am, acquirly, making 7-minute grad of ft, 1000 ft, surface). Reference of the complete well of the continue of the	e gauges into WDW-1, on into all three wells. offset wells WDW-1 aror a 30 hour injection pow-3 will be shut in for will continue to be shut if ire downhole pressure galient stops while cominum in hole with a temper.	pertinent details, and C. For Multiple Co WDW-2, and WDW and WDW-2 will be ceriod. Do not exceed a 30-hour falloff per in while monitoring gauges from all three gout of WDW-3 everature tool and con	mpletions: Attach we W-3 by 11:45am. Con shut-in. A constant in d 1000 psig wellhead priod. WDW-1 and William falloff pressure in all we wells. Tag bottom overy 1000 feet (7000 f	nincluding estimated date allbore diagram of the stinue injection into all injection rate will be pressure. DW-2 will remain shutthree wells. of fill and come out of the food of the stinue of the stinue injection into all injection rate will be pressure.

.

.

ſ

I hereby certify that the information above is true and complete to the best of my knowledge and belief.	
SIGNATURE Try of Thy Jones E-mail address: Honese Subsurfacegroup. Com PH. Tor State Use Only	_{.TE} 10/3/2011 one: <u>7/3-880-46</u> 40
APPROVED BY: <u>Cart</u> . <u>Alterna</u> TITLE <u>Environmental Engineer</u> DA Conditions of Approval (if any). Sur E-mil conditions duted 10/1912011 attach	TE 10/19/2011 A fo WDW-1.

;

Chavez, Carl J. EMNRD

rom:

Chavez, Carl J, EMNRD

خent:

Wednesday, October 19, 2011 4:06 PM

To:

'Moore, Darrell'

Cc:

Sanchez, Daniel J., EMNRD; VonGonten, Glenn, EMNRD; Dade, Randy, EMNRD

Subject:

Navajo Refining Company UIC Class I (NH) Injection Wells WDWs 1, 2 & 3 (UICI-008) Fall

Off Test Plan (August 2011)

Darrell:

The New Mexico Oil Conservation Division (OCD) is in receipt of your above subject test plan. OCD has already approved the Fall-Off Test (FOT) Plan with conditions on July 28, 2009. The OCD notes that it is also in the process of reviewing C-103s Sundry Notices for the upcoming FOTs.

OCD observes some changes in this FOT Plan submittal that are not acceptable to the OCD. For example, Exhibit 1 is not an acceptable exhibit to the OCD for reasons specified in the 2010 FOT report review and later during the May 2011 meeting in Santa Fe. However, the operator continues to submit exhibits with certain assumptions that have not been accepted or approved by the OCD, i.e., that the injection wells are show interconnection with the injection zone during past FOTs. Perhaps the operator can conduct the 2011 FOT with the information and exhibits needed to prove the interconnection of injection wells with the injection zone? The Certified PE should provide the exhibits in the 2011 FOT Report with the analysis and conclusions supporting any claims for the OCD to review and consider before approving. This is apparently a FOT frequency per well issue that the operator is attempting to prove.

The OCD provides the following comments, observations, and/or recommendations on the above subject plan below.

Comments:

- The OCD approved the original Fall-Off Test (FOT) Plan based on OCD Guidance dated December 3, 2007.
 There should not be any significant changes to this FOT Plan because it is flexible where needed to allow operators to implement it on each injection well.
- OCD likes to be notified to witness the installation of bottom hole gauges and to be present at least one hour before injection shut-off and commencement of FOT monitoring.
- OCD is concerned about the Section VI No. 1(e) WDW-3 Cement Bond Log quality being poor from 900 ft. to 1200 ft- especially at the depths: 2662 – 2160; 4876 – 5372; and 6750 – 7600 ft. micro annulus scenario.

Observations:

- Section V No. 2: The objective of the FOT is NOT to achieve or limit a 100 psig pressure differential before vs.
 after FOT injection vs. shut-off, but it is a minimum pressure differential that OCD stipulates in its guidance for a
 successful FOT and injection zone that may still continue to be utilized for disposal, i.e., not too pressured up and
 subject to continued fracturing under daily allowed maximum surface injection pressure operational limits.
- Section V No. 7 and Exhibit 1: OCD observes a bottom hole pressure chart for WDWs 1, 2 and 3 at 7660 feet that
 the operator presented in the 2010 FOT and again during a May 2011 meeting in Santa Fe, New Mexico to show
 the interconnection between injection wells and the injection formation. The OCD had commented that there was
 no explanation or conclusion provided from the Certified PE who conducted and completed the 2010 FOT report
 that supports the operator's claim that all injection wells are interconnected based on Exhibit 1.

Furthermore, the OCD requested a statement or information supporting the operator's claim by the Certified PE, but never received one. At the meeting, the OCD explained that based on Exhibit 1, there was no support for the claim. In order to make the interconnection determination, during each FOT at each well and off-set injection wells (WDWs not being FOT'd) before and throughout the FOT would need bottom hole pressures monitored in tandem at each well location to establish the interconnectivity of the injection wells with the receiving injection formation under a uniform time scale. This would be a chart that could be plotted that would show during the test the interconnectivity of the wells for each FOT. The OCD doubts that the operator can make the case for interconnectivity between injection wells and injection formation because of the significant distance between the injection wells and fact that sedimentation in formation varies laterally and uniformity in sedimentation, saturated porosity and permeability due to variation in sedimentation would by chance make the injection formation aerially extensive and uniform over a 3 to 5 mile radius from each injection well. Also, even if by chance there was

- uniformity over the mileage specified, the distance between injection wells and corresponding pressure would likely not be observed.
- Exhibit 6: OCD observes in Section B a proposed MIT once every 5 years. OCD's UIC Program requires annual MITs and/or after down hole work is performed on a well.

Recommendations:

- Operator is running survey logs to the bottom of fill or below USDW (fresh water) zones, which excludes an evaluation of casing in the fresh water zone. Please run logs up to surface.
- Be sure to also record and provide injection flow rate and pressure leading up to shut-off and monitoring throughout the FOT monitoring period. OCD needs to confirm that a pseudo steady-state condition was achieved before shut-off. This data is also needed for software modeling of the FOT.
- Please provide electronic data from the FOTs at each well in order for the OCD to run its software model to confirm the results in the report.
- Section V No. 13: Surface pressure monitoring and Horner Plot during injection should be used to confirm radial flow condition is achieved instead of waiting a set period if operator wishes to reduce the injection period.

Disclaimer: Please be advised that OCD has already approved with conditions Navajo Refining Company's Fall-Off Test (FOT) Plan on July 28, 2009, and is not providing approval of this FOT Plan; however, comments, observations and recommendations herein should help Navajo Refining Company understand the OCD's concerns based on the submittal.

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505

Office: (505) 476-3490 Fax: (505) 476-3462

E-mail: CarlJ.Chavez@state.nm.us

Vebsite: http://www.emnrd.state.nm.us/ocd/

Why not Prevent Pollution; Minimize Waste; Reduce the Cost of Operations; & Move Forward with the Rest of the Nation?" To see how, go to "Pollution Prevention & Waste Minimization" at:

http://www.emnrd.state.nm.us/ocd/environmental.htm#environmental)

Submit 1 Copy To Appropriate District Office	State of New Me	exico	Form C-103
District I - (575) 393-6161	Energy, Minerals and Nati	ural Resources	Revised August 1, 2011
1625 N French Dr., Hobbs, NM 88240 <u>District II</u> – (575) 748-1283	044 604 (677)		WELL API NO. 30-015-26575
811 S First St, Artesia, NM 88210	OIL CONSERVATION		5. Indicate Type of Lease
<u>District III</u> – (505) 334-6178 1000 Rio Brazos Rd , Aztec, NM 87410	1220 South St. Fra		STATE FEE
District IV - (505) 476-3460	Santa Fe, NM 8	7505	6. State Oil & Gas Lease No.
1220 S St. Francis Dr., Santa Fe, NM 87505			NM-0557371
(DO NOT USE THIS FORM FOR PROPODIFFERENT RESERVOIR USE "APPL	TICES AND REPORTS ON WELLS OSALS TO DRILL OR TO DEEPEN OR PL ICATION FOR PERMIT" (FORM C-101) F	UG BACK TO A	7. Lease Name or Unit Agreement Name Gaines WDW-3
PROPOSALS) 1. Type of Well: Oil Well	Gas Well Other Injection W	/eil	8. Well Number WDW-3
2. Name of Operator	one non El one injection in		9. OGRID Number
Navajo Refining Company			- Control Manage
3. Address of Operator	** !		10. Pool name or Wildcat: Navajo Permo-
Post Office Box 159, Artesia, Ne	w Mexico 88211		Penn
4. Well Location			
Unit Letter N:	790 feet from the South		feet from the West line
Section 01	Township 18S	Range 27E	NMPM County Eddy
	11. Elevation (Show whether DR	, RKB, RT, GR, etc.,	
	3609' GL, ' RKB		
12 Check	Appropriate Box to Indicate N	latura of Matica	Donart or Other Date
12. Check	Appropriate Box to indicate N	rature of Nonce,	Report or Other Data
NOTICE OF IN	NTENTION TO:	SUB	SEQUENT REPORT OF:
PERFORM REMEDIAL WORK		REMEDIAL WOR	
TEMPORARILY ABANDON TEMPORARILY ABANDON	CHANGE PLANS	COMMENCE DRI	
PULL OR ALTER CASING	MULTIPLE COMPL	CASING/CEMEN	I JOB []
DOWNHOLE COMMINGLE			
OTHER: PERFORM PRESSURE	FALLOFF TEST	OTHER:	
OTHER: PERFORM PRESSURE			_
OTHER: PERFORM PRESSURE 13. Describe proposed or comp	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAG	pertinent details, and	d give pertinent dates, including estimated date npletions. Attach wellbore diagram of
OTHER: PERFORM PRESSURE 13. Describe proposed or compof starting any proposed we proposed completion or recomposed completion.	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAC completion.	 pertinent details, and C. For Multiple Cor	d give pertinent dates, including estimated date appletions. Attach wellbore diagram of
OTHER: PERFORM PRESSURE 13. Describe proposed or compof starting any proposed we proposed completion or recomposed completion or recomposed completion.	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAC completion.	 pertinent details, and C. For Multiple Cor	d give pertinent dates, including estimated date
OTHER: PERFORM PRESSURE 13. Describe proposed or composed farting any proposed we proposed completion or recomposed completion or recomposed three wells.	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAGE completion. Il bottomhole gauges into WDW-1,	 pertinent details, and C. For Multiple Cor	d give pertinent dates, including estimated date appletions. Attach wellbore diagram of
OTHER: PERFORM PRESSURE 13. Describe proposed or composed from the proposed or composed with proposed completion or recomposed completion or recomposed three wells. December 12, 2011 – Instanting wells. December 13, 2011 – Composed becomber 14, 2011 – At 1	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAGE ompletion. Il bottomhole gauges into WDW-1, tinue injection into all three wells. 2:15pm, the offset wells WDW-1 are	pertinent details, and C. For Multiple Cor WDW-2, and WDW and WDW-2 will be seen	d give pertinent dates, including estimated date impletions. Attach wellbore diagram of V-3 by 11:45am. Continue injection into all shut-in. A constant injection rate will be
OTHER: PERFORM PRESSURE 13. Describe proposed or compof starting any proposed we proposed completion or recomposed completion or recomposed three wells. December 12, 2011 – Instanting wells. December 13, 2011 – Composed by the proposed completion or recomposed completion or recomposed three wells.	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAC completion. Il bottomhole gauges into WDW-1, tinue injection into all three wells. 2:15pm, the offset wells WDW-1 at d continue for a 30 hour injection per a second continue for a 20 hour injection per a second continue for a 30 hour injection per a second continue for a 30 hour injection per a second continue for a 30 hour injection per a second continue for a second	pertinent details, and C. For Multiple Cor WDW-2, and WDW and WDW-2 will be seriod. Do not exceed	d give pertinent dates, including estimated date impletions. Attach wellbore diagram of V-3 by 11:45am. Continue injection into all shut-in. A constant injection rate will be 11000 psig wellhead pressure.
OTHER: PERFORM PRESSURE 13. Describe proposed or composed of starting any proposed we proposed completion or recomposed	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAC completion. Il bottomhole gauges into WDW-1, tinue injection into all three wells. 2:15pm, the offset wells WDW-1 at d continue for a 30 hour injection per a second continue for a 20 hour injection per a second continue for a 30 hour injection per a second continue for a 30 hour injection per a second continue for a 30 hour injection per a second continue for a second	pertinent details, and C. For Multiple Cor WDW-2, and WDW and WDW-2 will be seriod. Do not exceed	d give pertinent dates, including estimated date impletions. Attach wellbore diagram of V-3 by 11:45am. Continue injection into all shut-in. A constant injection rate will be
OTHER: PERFORM PRESSURE 13. Describe proposed or composed of starting any proposed we proposed completion or recomposed	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAGeompletion. Il bottomhole gauges into WDW-1, tinue injection into all three wells. 2:15pm, the offset wells WDW-1 at d continue for a 30 hour injection per:00pm, WDW-3 will be shut in for a second or second	pertinent details, and C. For Multiple Cor WDW-2, and WDW and WDW-2 will be seriod. Do not exceed a 30-hour falloff per	d give pertinent dates, including estimated date impletions. Attach wellbore diagram of V-3 by 11:45am. Continue injection into all shut-in. A constant injection rate will be 11000 psig wellhead pressure.
OTHER: PERFORM PRESSURE 13. Describe proposed or composed of starting any proposed we proposed completion or recomposed	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAGeompletion. Il bottomhole gauges into WDW-1, tinue injection into all three wells. 2:15pm, the offset wells WDW-1 at d continue for a 30 hour injection per:00pm, WDW-3 will be shut in for a three wells will continue to be shut it	pertinent details, and C. For Multiple Cor WDW-2, and WDW and WDW-2 will be seriod. Do not exceed a 30-hour falloff per n while monitoring	d give pertinent dates, including estimated date impletions. Attach wellbore diagram of V-3 by 11:45am. Continue injection into all shut-in. A constant injection rate will be 1 1000 psig wellhead pressure. iiod. WDW-1 and WDW-2 will remain shut-falloff pressure in all three wells.
OTHER: PERFORM PRESSURE 13. Describe proposed or composed starting any proposed we proposed completion or recomposed com	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAC completion. Il bottomhole gauges into WDW-1, tinue injection into all three wells. 2:15pm, the offset wells WDW-1 at d continue for a 30 hour injection per 1:00pm, WDW-3 will be shut in for 1:00pm, wdw-3 will be shut in for 1:00pm, acquire downhole pressure gradient stops while comin	pertinent details, and C. For Multiple Cor WDW-2, and WDW and WDW-2 will be seriod. Do not exceed a 30-hour falloff per n while monitoring gauges from all three gout of WDW-3 ev	d give pertinent dates, including estimated date impletions. Attach wellbore diagram of v-3 by 11:45am. Continue injection into all shut-in. A constant injection rate will be 11000 psig wellhead pressure. iod. WDW-1 and WDW-2 will remain shut-falloff pressure in all three wells. wells. Tag bottom of fill and come out of the very 1000 feet (7000 ft. 6000 ft. 5000 ft. 4000
OTHER: PERFORM PRESSURE 13. Describe proposed or compof starting any proposed we proposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion or recomposed completion o	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAC completion. Il bottomhole gauges into WDW-1, tinue injection into all three wells. 2:15pm, the offset wells WDW-1 at d continue for a 30 hour injection per 1:00pm, WDW-3 will be shut in for a chree wells will continue to be shut it 1:00am, acquire downhole pressure germinute gradient stops while comin, surface). Run in hole with a temper	pertinent details, and C. For Multiple Cor WDW-2, and WDW and WDW-2 will be seriod. Do not exceed a 30-hour falloff per n while monitoring gauges from all three gout of WDW-3 ev	d give pertinent dates, including estimated date impletions. Attach wellbore diagram of V-3 by 11:45am. Continue injection into all shut-in. A constant injection rate will be 1 1000 psig wellhead pressure. iod. WDW-1 and WDW-2 will remain shut-falloff pressure in all three wells.
OTHER: PERFORM PRESSURE 13. Describe proposed or compof starting any proposed we proposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion or recomposed completion o	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAC completion. Il bottomhole gauges into WDW-1, tinue injection into all three wells. 2:15pm, the offset wells WDW-1 at d continue for a 30 hour injection per 1:00pm, WDW-3 will be shut in for 1:00pm, wdw-3 will be shut in for 1:00pm, acquire downhole pressure gradient stops while comin	pertinent details, and C. For Multiple Cor WDW-2, and WDW and WDW-2 will be seriod. Do not exceed a 30-hour falloff per n while monitoring gauges from all three gout of WDW-3 ev	d give pertinent dates, including estimated date impletions. Attach wellbore diagram of v-3 by 11:45am. Continue injection into all shut-in. A constant injection rate will be 11000 psig wellhead pressure. iod. WDW-1 and WDW-2 will remain shut-falloff pressure in all three wells. wells. Tag bottom of fill and come out of the very 1000 feet (7000 ft. 6000 ft. 5000 ft. 4000
OTHER: PERFORM PRESSURE 13. Describe proposed or compof starting any proposed we proposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion or recomposed completion o	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAC completion. Il bottomhole gauges into WDW-1, tinue injection into all three wells. 2:15pm, the offset wells WDW-1 at d continue for a 30 hour injection per 1:00pm, WDW-3 will be shut in for a chree wells will continue to be shut it 1:00am, acquire downhole pressure germinute gradient stops while comin, surface). Run in hole with a temper	pertinent details, and C. For Multiple Cor WDW-2, and WDW and WDW-2 will be seriod. Do not exceed a 30-hour falloff per n while monitoring gauges from all three gout of WDW-3 ev	d give pertinent dates, including estimated date impletions. Attach wellbore diagram of V-3 by 11:45am. Continue injection into all shut-in. A constant injection rate will be 11000 psig wellhead pressure. iniod. WDW-1 and WDW-2 will remain shut-falloff pressure in all three wells. It wells. Tag bottom of fill and come out of ery 1000 feet (7000 ft, 6000 ft, 5000 ft, 4000 fluct temperature survey from the surface to the
OTHER: PERFORM PRESSURE 13. Describe proposed or compof starting any proposed we proposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion or recomposed completion o	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAC completion. Il bottomhole gauges into WDW-1, tinue injection into all three wells. 2:15pm, the offset wells WDW-1 at d continue for a 30 hour injection per 1:00pm, WDW-3 will be shut in for a chree wells will continue to be shut it 1:00am, acquire downhole pressure germinute gradient stops while comin, surface). Run in hole with a temper	pertinent details, and C. For Multiple Cor WDW-2, and WDW and WDW-2 will be seriod. Do not exceed a 30-hour falloff per n while monitoring gauges from all three gout of WDW-3 ev	d give pertinent dates, including estimated date impletions. Attach wellbore diagram of V-3 by 11:45am. Continue injection into all shut-in. A constant injection rate will be 1000 psig wellhead pressure. Find. WDW-1 and WDW-2 will remain shut-falloff pressure in all three wells. We wells. Tag bottom of fill and come out of ery 1000 feet (7000 ft, 6000 ft, 5000 ft, 4000 fluct temperature survey from the surface to the
OTHER: PERFORM PRESSURE 13. Describe proposed or compof starting any proposed we proposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion or recomposed completion o	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAC completion. Il bottomhole gauges into WDW-1, tinue injection into all three wells. 2:15pm, the offset wells WDW-1 at d continue for a 30 hour injection per 1:00pm, WDW-3 will be shut in for a chree wells will continue to be shut it 1:00am, acquire downhole pressure germinute gradient stops while comin, surface). Run in hole with a temper	pertinent details, and C. For Multiple Cor WDW-2, and WDW and WDW-2 will be seriod. Do not exceed a 30-hour falloff per n while monitoring gauges from all three gout of WDW-3 ev	d give pertinent dates, including estimated date impletions. Attach wellbore diagram of V-3 by 11:45am. Continue injection into all shut-in. A constant injection rate will be 1000 psig wellhead pressure. Find. WDW-1 and WDW-2 will remain shut-falloff pressure in all three wells. We wells. Tag bottom of fill and come out of ery 1000 feet (7000 ft, 6000 ft, 5000 ft, 4000 fluct temperature survey from the surface to the
OTHER: PERFORM PRESSURE 13. Describe proposed or compof starting any proposed we proposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion or recomposed completion o	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAC completion. Il bottomhole gauges into WDW-1, tinue injection into all three wells. 2:15pm, the offset wells WDW-1 at d continue for a 30 hour injection per 1:00pm, WDW-3 will be shut in for a chree wells will continue to be shut it 1:00am, acquire downhole pressure germinute gradient stops while comin, surface). Run in hole with a temper	pertinent details, and C. For Multiple Cor WDW-2, and WDW and WDW-2 will be seriod. Do not exceed a 30-hour falloff per n while monitoring gauges from all three gout of WDW-3 ev	d give pertinent dates, including estimated date impletions. Attach wellbore diagram of V-3 by 11:45am. Continue injection into all shut-in. A constant injection rate will be 11000 psig wellhead pressure. Find. WDW-1 and WDW-2 will remain shut-falloff pressure in all three wells. We wells. Tag bottom of fill and come out of the ery 1000 feet (7000 ft, 6000 ft, 5000 ft, 4000 ft, 4000 ft, 5000 ft, 4000 ft, 5000 ft, 4000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft,
OTHER: PERFORM PRESSURE 13. Describe proposed or compof starting any proposed we proposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion or recomposed completion o	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAC completion. Il bottomhole gauges into WDW-1, tinue injection into all three wells. 2:15pm, the offset wells WDW-1 at d continue for a 30 hour injection per 1:00pm, WDW-3 will be shut in for a chree wells will continue to be shut it 1:00am, acquire downhole pressure germinute gradient stops while comin, surface). Run in hole with a temper	pertinent details, and C. For Multiple Cor WDW-2, and WDW and WDW-2 will be seriod. Do not exceed a 30-hour falloff per n while monitoring gauges from all three gout of WDW-3 ev	d give pertinent dates, including estimated date impletions. Attach wellbore diagram of V-3 by 11:45am. Continue injection into all shut-in. A constant injection rate will be 11000 psig wellhead pressure. Find. WDW-1 and WDW-2 will remain shut-falloff pressure in all three wells. We wells. Tag bottom of fill and come out of the ery 1000 feet (7000 ft, 6000 ft, 5000 ft, 4000 ft, 4000 ft, 5000 ft, 4000 ft, 5000 ft, 4000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft,
OTHER: PERFORM PRESSURE 13. Describe proposed or compof starting any proposed we proposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion or recomposed completion o	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAC completion. Il bottomhole gauges into WDW-1, tinue injection into all three wells. 2:15pm, the offset wells WDW-1 at d continue for a 30 hour injection per 1:00pm, WDW-3 will be shut in for a chree wells will continue to be shut it 1:00am, acquire downhole pressure germinute gradient stops while comin, surface). Run in hole with a temper	pertinent details, and C. For Multiple Cor WDW-2, and WDW and WDW-2 will be seriod. Do not exceed a 30-hour falloff per n while monitoring gauges from all three gout of WDW-3 ev	d give pertinent dates, including estimated date impletions. Attach wellbore diagram of V-3 by 11:45am. Continue injection into all shut-in. A constant injection rate will be 1000 psig wellhead pressure. Find. WDW-1 and WDW-2 will remain shut-falloff pressure in all three wells. We wells. Tag bottom of fill and come out of ery 1000 feet (7000 ft, 6000 ft, 5000 ft, 4000 fluct temperature survey from the surface to the
OTHER: PERFORM PRESSURE 13. Describe proposed or compof starting any proposed we proposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion or recomposed completion o	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAC completion. Il bottomhole gauges into WDW-1, tinue injection into all three wells. 2:15pm, the offset wells WDW-1 at d continue for a 30 hour injection per 1:00pm, WDW-3 will be shut in for a chree wells will continue to be shut it 1:00am, acquire downhole pressure germinute gradient stops while comin, surface). Run in hole with a temper	pertinent details, and C. For Multiple Cor WDW-2, and WDW and WDW-2 will be seriod. Do not exceed a 30-hour falloff per n while monitoring gauges from all three gout of WDW-3 ev	d give pertinent dates, including estimated date impletions. Attach wellbore diagram of V-3 by 11:45am. Continue injection into all shut-in. A constant injection rate will be 11000 psig wellhead pressure. Find. WDW-1 and WDW-2 will remain shut-falloff pressure in all three wells. We wells. Tag bottom of fill and come out of the ery 1000 feet (7000 ft, 6000 ft, 5000 ft, 4000 ft, 4000 ft, 5000 ft, 4000 ft, 5000 ft, 4000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft,
OTHER: PERFORM PRESSURE 13. Describe proposed or compof starting any proposed we proposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion or recomposed completion o	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAC completion. Il bottomhole gauges into WDW-1, tinue injection into all three wells. 2:15pm, the offset wells WDW-1 at d continue for a 30 hour injection per 1:00pm, WDW-3 will be shut in for a chree wells will continue to be shut it 1:00am, acquire downhole pressure germinute gradient stops while comin, surface). Run in hole with a temper	pertinent details, and C. For Multiple Cor WDW-2, and WDW and WDW-2 will be seriod. Do not exceed a 30-hour falloff per n while monitoring gauges from all three gout of WDW-3 ev	d give pertinent dates, including estimated date impletions. Attach wellbore diagram of V-3 by 11:45am. Continue injection into all shut-in. A constant injection rate will be 11000 psig wellhead pressure. Find. WDW-1 and WDW-2 will remain shut-falloff pressure in all three wells. We wells. Tag bottom of fill and come out of the ery 1000 feet (7000 ft, 6000 ft, 5000 ft, 4000 ft, 4000 ft, 5000 ft, 4000 ft, 5000 ft, 4000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft,
OTHER: PERFORM PRESSURE 13. Describe proposed or compof starting any proposed we proposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion or recomposed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion of the composed completion or recomposed completion o	oleted operations. (Clearly state all ork). SEE RULE 19.15.7.14 NMAC completion. Il bottomhole gauges into WDW-1, tinue injection into all three wells. 2:15pm, the offset wells WDW-1 at d continue for a 30 hour injection per 1:00pm, WDW-3 will be shut in for a chree wells will continue to be shut it 1:00am, acquire downhole pressure germinute gradient stops while comin, surface). Run in hole with a temper	pertinent details, and C. For Multiple Cor WDW-2, and WDW and WDW-2 will be seriod. Do not exceed a 30-hour falloff per n while monitoring gauges from all three gout of WDW-3 ev	d give pertinent dates, including estimated date impletions. Attach wellbore diagram of V-3 by 11:45am. Continue injection into all shut-in. A constant injection rate will be 11000 psig wellhead pressure. Find. WDW-1 and WDW-2 will remain shut-falloff pressure in all three wells. We wells. Tag bottom of fill and come out of the ery 1000 feet (7000 ft, 6000 ft, 5000 ft, 4000 ft, 4000 ft, 5000 ft, 4000 ft, 5000 ft, 4000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft, 5000 ft, 4000 ft, 5000 ft,

SIGNATURE Ting thy	Jones TITLE Project	Engineer DATE	10/3/2011
ype or print name Timothy	Land .	C Subsurface group. or PHONE:	713-880-4640
APPROVED BY: Conditions of Approval (if any):	TITLE	DATÉ	

I hereby certify that the information above is true and complete to the best of my knowledge and belief.



NAVAJO REFINING COMPANY Map ID No. ☐ Artificial Penetration Review

/			
OPERATOR BP	America Prod.	STATUS	Plugged
LEASE Empin	2 ABO Unit		Sec. 1T18S-R27E
WELL NUMBER	17A		BOREHOLE NA
DRILLED3-			ECTION ZONE \sim 722 $1'$
PLUGGED12-	01-08		<u>0-015- 00703</u>
REMARKS:			
	PIL	19:10-1566' u) 175 sx
	85,	1/8" @ 1470' W/-	750 sx
	77777777 Plug: 31	152'-3416' W/25	≤x
	CIBPO	5420' w/plug 51	420'-5179' WZS sx
	CIBP@	5770' w125' cn	ot on top
	,	low cut in 5½"	© 5797'-5803'
C1BP@5823' Perfs: 6040'-6080' = 5½"@6137'W1000_5x			
Or	ig TD: 6137'		
		Directional	TD: 7705'

Sise of	Flease inse	Size of Casing Size of Casing 8-5/8 5-1/2 rt lease manber. work must receive approval in wan Petroleum Corpe	Depth 950 6135 witing by the Geological Survey	O an approximate depth cows: Coment Circulate 2% Gel will 100 eachs neat on 1
Sine of Sine of To- NOTE: Lundersta Company	Flease inse	Size of Casing Size of Casing 3-5/8 5-1/2 rt lease member. work must receive approval in wan Petroleum Corpe	Depth 950 6135 writing by the Geological Survey	Coment Circulate 2% Gel wi 100 macks neat on 1
51 se of 33 7- BOZZ: I understa	Figure 1.7/8 Please 1.756	Size of Casing Size of Casing 3-5/8 5-1/2 rt lease member. work must receive approval in w	Depth 950 6135 writing by the Geological Survey	Coment Circulate 2% Gel wi 100 macks neat on 1
51 se of 13 7-	to test the Annual Model of the Annual Model o	Size of Casing S-5/8 5-1/2 rt lease mamber.	Depth 950 6135	Coment Circulate 2% Gel wi 100 macks neat on 1
5100 of 13	to test the state of the state	Abo. Casing programmes Size of Casing 8-5/8 5-1/2	Depth 950	Coment Circulate 2% Gel wi 100 sacks neat on 1
51se of	to test the s	Abo. Casing progr Size of Casing 8-5/8	Depth 950	Coment Circulate 2% Gel wi 100 sacks neat on 1
51se of	to test the s	Abe. Casing programmes Size of Casing	Depth	Gement Girculate 2% Gel wi
6200' t	te test the	Abe. Casing programmes Size of Casing	Depth	Generat.
We prop 6200' t	pose to dril	l the above well w abo. Casing progra	an will be as foll	o an approximate depth c ovs:
		DETAIL	S OF WORK	ed casings; indicate mudding jobs, cement-
مراب گ The elevat	(Field) Ed. Garage (E) tion of the derr	·// ick floor above sea leve	el is ft.	furnish lagaresh, see
	(Field)	(County or	Subdivision)	(State or Territory)
		13 - 5 (F		<u> </u>
			• ,	(W) 01 0001
Well No	1 is lo	cated 1980 ft. from	line and 660 ft	from W line of sec. 1
DBA MAI	CO REFINERI	water	230000	February 16 , 1959
	(INI	DICATE ABOVE BY CHECK MARK N		THER DATA)
NOTICE OF	INTENTION TO ABANI	OON WELL		
1	INTENTION TO PULL	1	SUPPLEMENTARY WELL HIST	ORY
	INTENTION TO SHOOT	i	SUBSEQUENT REPORT OF AL	
1		WATER SHUT-OFF	SUBSEQUENT REPORT OF AL	1 1
NOTICE OF			- II	OOTING OR ACIDIZING.
NOTICE OF	INTENTION TO CHANG			

GPO 9 18 507

FORM C-128 NEW MEXICO OIL CONSERVATION COMMISSION Revised 5 1/57 WELL LOCATION AND ACREAGE DEDICATION PLAT SEE INSTRUCTIONS FOR COMPLETING THIS FORM ON THE REVERSE SIDE SECTION A Operator U.S.A. Malco Refineries F Pan American Pet. Corp. Unit Letter Section County Township 27 E Edd v 18 S 1 Actual Footage Location of Well 660 West 1980 South feet from the line and feet from the line Ground Level Elev. Producing Formation Dedicated Acreage Abo Empire Abo 70 Acres 1. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES NO _____. ("Cluner" means the person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or for himself and another. (65-3-29 (e) NMSA 1935 (omp.) another. (65-5-29 (e) NAMA (correspondence) 2. If the answer to question one is "no," have the interests of all the owners been consolidated by communication of the correspondence of the correspond wise? YES_____NO____. If answer is "yes," Type of Consolidation _____ 3. If the answer to question two is "no," list all the owners and their respective interests below: Owner Land Description SECTION B CERTIFICATION I hereby certify that the information in SECTION A above is true and complete to the best of my knowledge and belief Name Original Signed by BROWN Ridld Superintendent Company Pan American Petroleum Corp February 16, 1959 I hereby certify that the well location shown on the plat in SECTION Is was -660'--O 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 knowledge and belief.

2000

1500

1000

500

330 660 990 1320 1650 1980 2310 2640

Date Surveyed

2-10-59

Registered Professional Engineer and or Land Surveyor, JOHN W. WEST

N. M. - PE & L.S. NO. 676

JOHN W. WEST ENGINEERING COMPANY

412 NORTH DAL PASO HOBBE, NEW MEXICO

February 12, 1959

Pan American Pet. Corp. Hobbs, New Mexico

Gentlemen:

On February 10, 1959, a survey was made to locate your U.S.A. Malco Refineries "f" No. 1 well at a point 1980 feet from the South line and 660 feet from the West line of Sec. 1, Township 18 South, Range 27 East, N.M.J.A., Eddy County, New Mexico.

A Flag was set at the USGLO Quarter corner marker common to Sections 1 and 2 and the the Transit was set up at the U.S. G.L.O. Section corner marker common to Sections 1, 2, 11 and 12. Thence chaining North from the Transit on the West line of Section 1 a distance of 1980 feet, thence East 660 feet to the location site of the USA Malco Refineries "F" No. 1 well. As a check on our survey we chained West from the location site 660 feet and thence North 609.5 feet to the USGLO Quarter corner marker common to sections 1 and 2, checking in within 0.6 feet of the distance as shown on the USGLO Township Plats.

I hereby certify that the foregoing survey was made in the field by me and that the same is true and correct to the best of my knowledge and belief.

Respectfully submitted,

John W. West

FEB1 8 1959

U. J. GLOCOGISTA CHE ARTESIA, NEW MEXES

NE MEXICO OIL CONSERVATION COM ASSION Santa Fe, New Mexico

(Form C-104) Revised 7/1/57

REQUEST FOR (OIL) - //F/AF//ALLOWABLE

New Well

This form shall be submitted by the operator before an initial allowable will be assigned to any completed Oil or Gas well. Form C-104 is to be submitted in QUADRUPLICATE to the same District Office to which Form C-101 was sent. The allowable will be assigned effective 7:00 A.M. on date of completion or recompletion, provided this form is filed during calendar month of completion or recompletion. The completion date shall be that date in the case of an oil well when new oil is delivered into the stock tanks. Gas must be reported on 15.025 psia at 60° Fahrenheit.

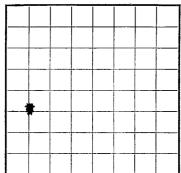
			•	Hobbs, New Mexico April 24, 195
				(Place) (Date)
				ING AN ALLOWABLE FOR A WELL KNOWN AS:
Americ	Comme	Trolen	m Corp.	- Malco Refineries "F" , Well No. 1 , in WW 1/4 SW 1/4
Ĭ	Compar	, Sec	1	(Lesse) , T. 18 S , R. 27 E , NMPM., Empire Abo Poc
Unit E	Letter Eddy			County Date Spudded 3-26-59 Date Drilling Completed 4-20-59
		dicate lo		Elevation 3581 RDB Total Depth 6137 PBTD 6101
D	C	В	A	Top 011/94 Pay 5460 Name of Prod. Form. Abo PRODUCING INTERVAL -
E	F	G	н	Perforations 6040-6080 with 2 shots per foot Open Hole — Depth Casing Shoe 6137 Depth Tubing 6077
				OIL WELL TEST -
L	K	J	I	Choke Natural Prod. Test:bbls.oil,bbls water inhrs,min. Size
M	N	0	P	Test After Acid of for the Treatment (after recovery of volume of oil equal to volume of Choke load oil used): 82 bbls,oil, no bbls water in 24 hrs, min. Size 10
•				GAS WELL TEST -
e. 1,	T_1A	S. R-2	7-K	·
190	805-	6600	7	Natural Prod. Test:MCF/Day; Hours flowedChoke Size
Size		and Gemei Feet	nting Recor	•
				Test After Acid or Fracture Treatment: MCF/Day; Hours flowed
8-5/	/8 1	468	750	Choke Size Method of Testing:
5-1/	/2 6	167	1000	Acid or Fracture Treatment (Give amounts of materials used, such as acid, water, oil, and
2-3/	/0 /	000		sand): Acidized with 500 gallons 15% regular Casing Tubing Date first new
2-3/	6	077		Casing PKR Tubing Date first new Press. 725 oil run to tanks 4-20-59
				Oil Transporter Malco Refineries Inc.
				Gas Transporter
Remarks	:	•••••		• • • • • • • • • • • • • • • • • • • •
I he	ereby c	ertify tha	it the info	ormation given above is true and complete to the best of my knowledge.
Approve	d	,		PAN AMERICAN PETROLEUM CORPORATION (Company or Operator) Original Signed (Company or Operator) Original Signed (Company or Operator)
,	OIL C	ONSER	VATION	COMMISSION By: (Signature)
Ru.	MS	(True	estro	Title Superintendent
	·/······	Sa. Va. A. K. K. K. S	7	Send Communications regarding well to:
Title	••••••	•••••••••	y	Name
				Box 68 - Hobbs, New Mexico
				COMMA PROFESSIONAL

NEW M ICO OIL CONSERVATION CO IISSION Form C-110 SANTA FE, NEW MEXICO Revised 7/1/55

(File the original and 4 copies with the appropriate district office)

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION; TO TRANSPORT OIL AND NATURAL GAS

Company or Oper	ator Pan America	n Petroleum (Corporation	_Lease	Malco Refineries "F"
Well No. 1	Unit Letter	<u> </u>	18 SR 27 EPo	ol <u>Undesi</u>	mated
County Eddy	Ki	nd of Lease	(State, Fed. o	r Patented	Federal
If well produces of	oil or condensate	e, give locat	ion of tanks:Un	it F _S	1 T 18 SR 27 E
Address Box 660	0 - Roswell. New	Mexcles			
Address Box 660 (Give	address to whi	ch approved	copy of this fo	rm is to be	e sent)
Authorized Trans	sporter of Gas_				
Address(Give					
(Give	address to whi	ch approved	copy of this for	rm is to be	esent)
If Gas is not bein					
Vented pending	market arrangem	ents.			
_					
Reasons for Filir	ng:(Please check	proper box)	New Well_		(x)
Change in Transp	porter of (Check	One): Oil () Dry Gas () C'head () Condensate ()
	•		Other		
Change in Owner	ship	()	Other	ive explana	() ation below)
Remarks:			•		,
mission have bee	certifies that th en complied with	ı .		the Oil Co	nservation Com-
Executed this the	24th day 01 A	DLTT	19 <u>59</u>		
			Ву		Original Signed By
Approved	3 4	19	Title Fiel	d Superinte	I W DD
OIL CONSI	ERVATION COM	IMISSION	Company_	Pan America	an Petroleum Corporati
By MLC	Trustron	9	Address	Box 68	
Title	7		-	Hobbs New	Movina
LITIC	v				AVEN A D. A. STATE



UNITED STATES

UNITED STATES

GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Pan American Petroleum Corp. Address Lessor or Tract USA Malco Refinerica NPR Field Empire Abo State New Mexico Well No. 1. Sec. 1. T. 183 R. 275Merdidan Location 1980 ft. No of S. Line and 660 ft. First of William Location 1980 ft. S. of S. Line and 660 ft. First of William Location 1980 ft. No of S. Line and 660 ft. First of William Location 1980 ft. No of S. Line and 660 ft. First of William Location 1980 ft. No of William Location	LO	CATE WEL	L CO	RRECTLY			.	<u> </u>				,	
Well No. 1 Sec. 1 T. 18S R. 278Meridian Location 1960 ft. No. of S. Line and 560 ft. Exp. of V. Line of Section 1 Elevation 3583. The information given herewith is a complete and correct record of the well and all 1960 ft. Signed Si	-											New Me	xico
Location 1980 ft. No. 1 from to No. 2, from to No. 3, from to No. 3, from to No. 3, from to No. 4, from to No. 4, from to No. 2, from to No. 4, from to No. 5, from to No. 4, from to No. 4, from to No. 4, from to No. 5, from to No. 6, from No. 6, fro	Lessor	or Tract	_US	A Malco	Refine	ries "P"	Fie	ld	Empire	Abo	_ State	Nev	Mexico
The information given herewith is a complete and correct record of the well and all plants of a can be determined from all available records. Signed Date April 23, 1959 Title Field Superint endemt The summary on this page is for the condition of the well at above date. Commenced drilling 3-26-19.59 Finished drilling 4-20-19.59 OIL OR GAS SANDS OR ZONES (Denote gas by G) No. 1, from (OLO to 6080 No. 4, from to No. 5, from to No. 3, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 1, from to No. 3, from to No. 4, from to No. 4, from to No. 2, from to No. 4, from to No. 4, from to No. 4, from to No. 4, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 7, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 7, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 7,											v	Eddy	
The information given herewith is a complete and correct record of the well and all plants of a can be determined from all available records. Signed Date April 23, 1959 Title Field Superint endemt The summary on this page is for the condition of the well at above date. Commenced drilling 3-26-19.59 Finished drilling 4-20-19.59 OIL OR GAS SANDS OR ZONES (Denote gas by G) No. 1, from (OLO to 6080 No. 4, from to No. 5, from to No. 3, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 1, from to No. 3, from to No. 4, from to No. 4, from to No. 2, from to No. 4, from to No. 4, from to No. 4, from to No. 4, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 7, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 7, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 7,	Locati	on 198 (9 ft. {	$\left. rac{\mathbf{N}}{\mathbf{S}} \right $ of	S_ Line a:	nd -660 ft	. [E.] of _	₩L	ine of	Sect:	ion 1	Eleva	ation 3581
The summary on this page is for the condition of the well at above date. Commenced drilling 3-26- 19 59 Finished drilling 4-20- 19 59 OIL OR GAS SANDS OR ZONES (Denote gas by 6) No. 1, from 600 to 6080 No. 4, from to No. 5, from to No. 3, from to No. 6, from to No. 6, from to No. 6, from to No. 1, from to No. 4, from to No. 1, from to No. 4, from to No. 1, from to No. 4, from to No. 2, from to No. 4, from to No. 4, from to No. 2, from to No. 4, from to No. 4, from to No. 2, from to No. 4, from to No. 4, from to No. 5, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from No. 6, from to No. 6, from to No. 6, from to No. 6, from No. 6, from No. 6, from No. 7, from No. 7, from No. 8, from No. 8, from No. 8, from No. 8, from No. 8, from No. 8, from No. 8, from No. 9, f	\mathbf{T}	he <mark>inform</mark>	ation	n given h	erewith is	s a comple vailable rec	te and co	rrect 1	ecord of	he wel	ll and al	Priginal W	floor relative to see level)
Commenced drilling	Date -		Ap	ril 23,	1959				Title	P1	eld Suj	pe rin t	endent
OIL OR GAS SANDS OR ZONES (Denote gas by G) No. 1, from to No. 4, from to No. 5, from to No. 5, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 6, from to No. 7, from to No. 7, from to No. 8, from to No. 1, from to No. 1, from to No. 1, from to No. 2, from to No. 4, from to No. 4, from to No. 4, from to No. 4, from to No. 4, from to No. 4, from No. 5, from No. 6, from No. 6, from No. 6, from No. 6, from No. 6, from No. 7, from No. 1, from No. 1, from No. 1, from No. 2, from No. 2, from No. 2, from No. 4, from No. 6, from No. 6, from No. 6, from No. 6, from No. 6, from No. 7, from No. 1, from No. 1, from No. 1, from No. 1, from No. 2, from No. 2, from No. 2, from No. 2, from No. 2, from No. 2, from No. 4,	\mathbf{T}	he summa	ary o	n this pa	ge is for t	he conditi	on of the	well a	t above da	ite.			
No. 1, from to No. 5, from to No. 6, from to No. 3, from to No. 1, from to No. 1, from to No. 1, from to No. 1, from to No. 1, from to No. 2, from to No. 3, from to No. 2, from to No. 4, from to No. 2, from to No. 4, from to No. 2, from to No. 4, from to No. 2, from to No. 4, from to No. 4, from No. 2, from No. 4, from No. 5, from No. 4, from No. 4, from No. 5, from No. 4, from No. 4, from No. 5, from No. 6, from No. 6, from No. 6, from No. 6, from No. 6, from No. 7, from No. 7, from No. 7, from No. 8, from No. 8, from No. 8, from No. 9, from No. 1, from No. 1, from No. 1, from No. 1, from No. 2, from No. 1, from No. 2, from No. 2, from No. 2, from No. 2, from No. 2, from No. 2, from No. 2, from No. 2, from No. 2, from No. 2, from No. 2, from No. 3, from No. 4, from No. 2, from No. 4, from No. 2, fr	\mathbf{Comm}	enced dri	lling		3-26	, 19	59 Fi	\mathbf{nished}	drilling .			4-20-	, 19 59
No. 1, from to No. 5, from to No. 5, from to No. 3, from to No. 3, from to No. 3, from to No. 1, from to No. 1, from to No. 1, from to No. 2, from to No. 4, from to No. 2, from to No. 4, from to No. 2, from to No. 4, from to No. 4, from to No. 5, from to No. 4, from to No. 5, from to No. 4, from to No. 4, from No. 4, from No. 4, from No. 4, from No. 4, from No. 4, from No. 5, from No. 6, from No. 4, from No. 4, from No. 6, from No. 6, from No. 6, from No. 6, from No. 7, from No. 6, from No. 7, from No. 6, from No. 7, from No. 7, from No. 8, from No. 8, from No. 8, from No. 1, from No. 6, from No. 7, from No. 7, from No. 7, from No. 7, from No. 8, from No. 8, from No. 8, from No. 1, from No. 7,					OI				ZONES				
No. 3, from to No. 6, from to No. 1, from to No. 1, from to No. 2, from to No. 4, from to CASING RECORD Size Weight Threads per Inch Make Amount Kind of shoe Cut and pulled from From To Purpose Pro	No. 1,	from	60	40	_ to6	080	No	o. 4, fr	om		to)	
IMPORTANT WATER SANDS No. 1, from	No. 2,	from			_ to		No	o. 5, fr	om	·	to)	
No. 1, from to No. 3, from to No. 4, from to No. 2, from to No. 4, from to CASING RECORD Size Weight Threads per Inch Inch Inch Inch Inch Inch Inch Inch	No. 3,	from			_ to		No	o. 6, fr	om		to)	
No. 2, from					I	MPORTA	NT WAT	ER S	ANDS				
Size weight per loot Threads per make Amount Kind of shoe Cut and pulled from To Purpose Size Weight per loot Threads per inch Make Amount Kind of shoe Cut and pulled from To Purpose	No. 1,	from			- to		No	o. 3, fr	om		to		
Size weight threads per inch Make Amount Kind of shoe Cut and pulled from From To Purpose From	No. 2,	from			_ to		No	o. 4, fr	om		to)	
Size easing Where set Number sacks of cement Method used Mud gravity Amount of mud used PLUGS AND ADAPTERS Heaving plug—Material Size SHOOTING RECORD Little of the control of the con	_			-		CAS	ING REC	CORD				N1 1	2 1.
MUDDING AND CEMENTING RECORD Size Shooting sake Shooting sake Shooting sake Size Shooting sake Sho		Weight per foot	Th	reads per inch	Make	Amount	Kind of sh	noe C	ut and pulled	from			Purpose
MUDDING AND CEMENTING RECORD Size asing Where set Number sacks of cement Method used Mud gravity Amount of mud used ### PLUGS AND ADAPTERS Heaving plug—Material Length Depth set Size SHOOTING RECORD	0-5/0 5-1/ 2	coron, 34 coron, 34 c) s kore nta	T TOTAL	⊜ sµ1.8	55-ل احل	7 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Floa 7 Flo	t.	saue in tac een dy cami ist nerd, po	ced. gov	neu Park	er po	and reflection
MUDDING AND CEMENTING RECORD Size easing Where set Number sacks of cement Method used Mud gravity Amount of mud used 8-5/8 1470 750 HONCO 5-1/2 6137 HONCO PLUGS AND ADAPTERS Heaving plug—Material Length Depth set Size SHOOTING RECORD	'n	a of the tree	रहरोग			ខណ៌ដែលប្រ	1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Pleast stare	रंग वेह क	il the date	s of redr	ling, together
Size casing Where set Number sacks of cement Method used Mud gravity Amount of mud used 8-5/8 1470 750 H04C0 5-1/2 6137 H04CO PLUGS AND ADAPTERS Heaving plug—Material Length Depth set Adapters—Material Size SHOOTING RECORD					3433	<u> </u>	<u> </u>		S WELL		-43004-35 R	21 / O/ 55 H W (*)	A POSMETH S. BUTTLE
Size casing Where set Number sacks of cement Method used Mud gravity Amount of mud used 8-5/8 1470 750 H04C0 5-1/2 6137 H04CO PLUGS AND ADAPTERS Heaving plug—Material Length Depth set Adapters—Material Size SHOOTING RECORD					NATION	INC AND	CENTER		o proor				
8-5/8 1470 750 HOWCO 5-1/2 6137 HOWCO PLUGS AND ADAPTERS Heaving plug—Material Length Depth set Adapters—Material Size SHOOTING RECORD	Size casing	Where s	et	Numbe		· · · · · · · · · · · · · · · · · · ·	<u> </u>				An	nount of m	ud used
Heaving plug—Material Length Depth set Adapters—Material Size SHOOTING RECORD	8-5/ 5-1/												
Heaving plug—Material Length Depth set Adapters—Material Size SHOOTING RECORD							-						
SHOOTING RECORD		1]	Length						
	Adapte	rs-Mate	erial		:								
	Size	Sh	ıell use	đ	Explosive us	1				h shot]	Depth clear	ned out
								-					

Cable tools were			feet, and from		
Compl The produ	teted April 21 ction for the first	¹⁹ 59	Put to producing		
	% water; and		Gravity, °Bé		
			Gallons gasoline per 1,000 cu.		
		n	1 , , , ,		
_		EMPI	LOYEES		
B. J.	Wright	, Driller	R+ B. M	1105	Driller
J. W	Martin	, Driller	W. P. T	adlock,	Driller
			ON RECORD		
FROM-	то-	TOTAL FEET	FORMATIO	N	
0 387 600 1025 1463 1521 4809 4822 4844 4911 5557	387 600 1025 1463 1521 4809 4822 4844 4911 5557 6137	387 213 425 438 58 3288 13 22 67 646 580	Red Bed, Anhy. Anhy., Gyp Anhy., Lime Lime Lime Lime Lime Dolomite Lime Lime Lime	TOPS San Andres Glorieta Abo Reef	- 1830 - 3220 - 5460
		100	VER)		3094-4

HISTORY OF OIL OR GAS WELL

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and it any casing, was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shorts. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

See Bo, no water in St hire. (85.3 MT) perforated 600.01-60801 w/s shots per floor sad for sad fill of the sad fill of the sad fill of the sad fill of the sad fill of the sad fill of the sad of the sad fill of the sad of

Grand British Color Profit Adequation and

Original Signed by YHUSS AL &

1 1990 5.7

and a south

Page 1

FORMATION RECORD—Continued

	Control of the Contro	1 4 4 A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.1 19 6.5	1 - 4 - 4 - 1 - 1 - 1 - 1
			1 (2.34)	tion source sources
	·			
. 71				
V			eriti kalan dalamen	The second
	Company (ABP) (Vario)		្រស់គ្រង ស្រុំ	> <u>.</u> -> <u>.</u>
	rug to in a viorost legic da la la disku			. • }
			to the training of the	.d % ()
	e de la companya del companya de la companya del companya de la co			
	- 1997年 - 19	1		4
	·			
			·	
		_		
	FORMATION	TOTAL FEET	-от	EBOM-

NEW MEXICO

OIL CONSERVATION COMMISSION

Post Office Box 2045 Hobbs, New Mexico May 26, 1959

Pan American Petroleum Corporation P. O. Box 68 Hobbs, New Mexico

Re: Undesignated Well Placed in Pool

Gentlemen:

Order K-1397, your Malco Refineries "F" No. 1

cil well in Unit 1 of Section 1, Township 18 Secret, Range 27

East, which is currently listed in the "Undesignated Section" of the Proration Schedule, will appear in the Pool in the

Pool in the

Schedule.

Please file Form C-110 showing the change in pool designation of this well with the Artesia office of the Oil Conservation Commission.

Yours very truly,
OIL CONSERVATION COMMISSION

R. F. Montgomery Proration Manager

RFM:mg

NEW 1 XICO OIL CONSERVATION CC MISSION SANTA FE, NEW MEXICO

Form C-110 Revised 7/1/55

(File the original and 4 copies with the appropriate district office)

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS MY 85%

Company or Opera	tor Pan American Petroleu	m Corporation	Lease_	Malco Rafineries "F"	i
Well No. 1	Unit Letter L S 1	T <u>18</u> R 27 I	Pool Kar	otre Abo	
	Kind of Leas	e (State, Fed.	or Patent	ed) Federal	
Authorized Trans	porter of Oil or Condensat	e <u>Continental</u>	Pipe Line	Company	
Address(Give	address to which approve	Box 367. Az	tesia. New form is to	Mexico be sent)	
Authorized Trans	porter of Gas				
Address(Give	address to which approve g sold, give reasons and a	ed copy of this	form is to present d	be sent) isposition:	•
	erket arrangements				
					_
Reasons for Filin Change in Trans	ng:(Please check proper be porter of (Check One): Oil	ox) New We	ell() C'head	d() Condensate()	
Change in Owner Remarks:	ship() Other Che	Give expl	orter () anation below)	-
Filed to change effective May 1,	transporter from Malco Ref , 1959•	ineries Inc. to	Continent	al Pipe Line Company	
The undersigned mission have be	certifies that the Rules are complied with.	nd Regulations	of the Oil	Conservation Com-	
Executed this th	e <u>loth</u> day of May	1 959		al Signed by Z. BROWN	-
Approved_	AY 2 5 1959 19_	Title	rea Superi	ntendent	-
OIL CONS	ERVATION COMMISSION	Compa	ny Pan Ame	rican Petroleum Corpo	ratio
By Miler	metrong	Addres	s Box 68	- Hobbs, New Mexico	
Title Gal Alb i	S SAE IFBRECTES				

.

.

NEW MEXICO OIL CONSERVATION COMMISSION Revised 7/1/55 SANTA FE, NEW MEXICO

Form **C-110**

(File the original and 4 copies with the appropriate district office)

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION TO TRANSPORT OIL AND NATURAL GAS

CHILDWIN	or Operator_	Pan Americ	an Petroleu	m Corp	oration_	Lease Male	O MATTER	
ell No.		nit Letter_				ool Empire	Abo	
en 140		•			. 17-4 -	. Datented)	Fede	ral
ounty	Eddy	K	ind of Leas	e (Stat	e, rea. o	r Patented)_		
well pro	oduces oil or	condensat	e, give loc	ation o	i tanks: U	nit 7 S 1		
uthorize	d Transport	er of Oil or	Condensat	te	tinental	ipe Line Com	O A TO	
	Box 367	Artesia	. Hew Mexico	•				
ddress_	(Give add	ress to whi	ch approve	d copy	of this fo	rm is to be	sent)	
uthorize	d Transport							
						Date Connec	ted	
	(Cive add	reas to whi	ch approve	d copy	of this fo	rm is to be	sent)	•
Gas is	not being sol	d, give rea	sons and a	lso ex	plain i ts p	resent dispo	sition:	
	ending market							
, <u></u>						`		
			•	· ·				
200000	for Filing:(P	lease chec	k proper bo	ox)	New Well			_()
Thanga it	Transporte	r of (Check	One): Oil	() D	ry Gas 1) C'head (Condens	ate ()
Juange II	1 11ansporte							
Change in	n Ownership		() 01	ther Char	ge Pool Desi	mation	<u>(X)</u>
Remarks					, (Give explanat	ion perow	•
	o show pool	dosignation	as Empire	Abo.		*		
	o show pool	iosignation	as Empire	Abo.		*.		
	o show pool (d esignatio n	as Empire	Abo.				
	o show pool (dosignation	as Empire	Abo.				
filed t					ulations o	f the Oil Cor	servation	Com-
Filed t	rsigned cert	ifies that t	he Rules at		ulations o	f the Oil Cor	servation	Com-
Filed to	rsigned cert have been co	ifies that t emplied wit	he Rules at h.	nd Reg				Com-
Filed t	rsigned cert	ifies that t emplied wit	he Rules at h.	nd Reg			Signed by	Com-
Filed t	rsigned cert have been co	ifies that t emplied wit	he Rules at h.	nd Reg	59	Original J. W.	Signed by BROWN	Com-
Filed to	rsigned cert have been co	ifies that to implied with	he Rules at h.	nd Reg	59	Original	Signed by BROWN	Com-
Filed to	rsigned cert have been co	ifies that tomplied with day of	he Rules at h.	nd Reg	59	Original J. W.	Signed by BROWN	Com-
Filed to The under the und	rsigned cert have been co this the 29	th day of	he Rules at h. Hay	nd Reg	59 ByTitle	Original J. W.	Signed by BROWN	
Filed to The under mission to Executed Approved	rsigned cert have been co	th day of	he Rules at h. Hay	nd Reg	59 ByTitle	Original J. W.	Signed by BROWN	
Filed to The under mission of the Executed Approved	rsigned cert have been co this the 29	th day of	he Rules at h. Hay	nd Reg	59 ByTitle	Original J. W. Superinter Pen American	Signed by BROWN	
Filed to The under mission to Executed Approved	rsigned cert have been co this the 29	th day of	he Rules at h. Hay	nd Reg	By	Original J. W. Superinter Pen American	Signed by BROWN	

ACTO	O METRIC	T OFFI	CE
Vo. Car	g sal od		5
3		: 1	
		٠ ت.ت	
Срич			
Santa Fo			<u> </u>
Proration (ti	ice		
State Land G	ffice		
U. S. G. S.,			
Transporter			11
File		\perp	· V

Post Office Box 68 Hobbs, New Mexico

April 16, 1959

Pile:

JWM-131-986.510.1

Subject: Request for Exeption to Rule 111 Deviation Tests, USA Malco Refineries "F" No. 1. Empire Abo Field

New Mexico Oil Conservation Commission (2) P. O. Box 871 Santa Pe, New Mexico

Attention: Mr. D. S. Nutter, Chief Engineer

Gentlemen:

This has reference to your conversation with Mr. N. S. Whitmore of Pan American on April 14, 1959, concerning the deviation test requirements of Rule 111. It is our understanding that the Commission may grant exceptions to the requirement for running a directional survey where computation of the deviation surveys periodically run in conjunction with drilling operations indicates the bottom of hole could not conceivably be off the lease.

Currently, Pan American Petroleum Corporation is drilling their joint interest USA Malco Refineries "F" No. 1 in the Empire Abo Field. This well was staked 1980 feat from the south line and 660 feet from the west line of Section 1, T-18-5, R-27-E, Eddy County, New Mexico. The projected total depth is approximately 6150 feet. At a depth of 4805 feet a deviation test registered 6-1/20 which was the first deviation recorded above 5°. Since that depth the deviation has varied between 6-1/4° and 6-1/20 with the well currently drilling at approximately 5530 feet.

The attached tabulation furnishes the deviation surveys run on the well to date along with a computation of the drift in a continuous direction. The assumption that the drift would remain in a continuous direction was made to analyse the drift under the least desirable condition to determine if the bottom of the hole were possibly approaching a lease line. That drift would be maintained in a continuous straight line is also considered very unlikely to occur under actual drilling conditions.

These data indicate the horizontal drift from the surface to 5500 feet to be approximately 270 feet. Considering the deviation would remain relatively constant for the remaining 650 feet to be drilled, the maximum anticipated horisontal drift would approach 343 feet. Thus it is indicated that deviations to total depth of the magnitude currently encountered would not place the bottom of the well that line for this 660 foot location.

Section 1985

PROPERTY OF THE PROPERTY OF THE PROPERTY OF

ាំ ១៩៤ ១៩៤ និង ១៩៣ សព្វទូវ១ ១៩៦ ខ្លួន៤១១

lv¥5. "Widtios

1.16.30.30.40.34.40.

of in Ligenia rou day, so a som des graes i mo**lfnive**d tig veri mit inumm**rite**n op**i**fe for albiil oda opimit _ei ven

on journal of the second of t

manadam ing a samahan da da sami meladihan d

វៈសាសស្នាំសាក

in the social property of the social sections.

ుకుండారు. మాట్ మన కారివేశారార్ అయింది అముందుకుండి అముకుండారు. అని ఇక్కానికి అందిని కార్కు కొన్నారు. అది కార్కి మంది కారు మన్ని మంది కింది కార్కి మందికి అనికి అనికి మందికి కార్కి మందికి కార్కి మందికి కార్కి మందికి కార్కి మందికి కార్కి మందికి కార్కి మందికి కార్కి మందికి కార్కి మందికి కార్కి మందికి కార్కి మందికి కార్కి మందికి కార్కి మందికి కార్కి మందికి కార్కి మందికి కార్కి మందికి కార్కి మందికి కార్కి మందికి ప్రాంతి కార్కి మందిక

La lar engrana soldenven pod redella i i translave e december of estado ed.

almentation of la divide esta la redella en la redice estado estado ed.

e la divide of la divide esta la redella estado

 It is therefore respectfully requested that Pan American Petroleum Corporation be granted an exception to Rule III for running a directional survey on their USA Maleo Refineries "F" No. 1. Your early consideration of this request will be sincerely appreciated as it is anticipated that drilling operations will be completed by April 18, 1959.

Yours very truly,

PAN AMERICAN PETROLEUM CORPORATION

J. W. Brown Field Superintendent

Ву:

ee: Mr. M. L. Armstrong New Mexico Oil Conservation Commission Artesia, New Mexico is in therefore respectfully requested that Pan American Polition in the creation described a constant of granted a constitution to doly till for remains a directional curve, on their fill Africa definitions with mo. 1. Your carry consider class of the request will be almostally approvious as it is articlested that armitical operations will be completer by april 15, 1950.

You are very truly,

CONTROCERS SUBJESTED SANGERS OF

). () trown Field bleamate wast

And the second s

oc: Pr. L. L. Arestrong New Alexico USI Conservation Courtlesson Artesia, New Hoxico

DEVIATION SURVEYS USA MALCO REPUBLIES "F" NO. 1

Depth Toteo Ran	Interval Between Totoos	Drift Indicated By Totso	Horizontal Drift Over Interval	Cumulative Horisontal Drift
5001	5001	3/40	6.551	6.55
9701	4701	3/40	6.151	12.70'
1350'	3801	3/40	4.971	17.67'
18501	5001	1-3/40	15.271	32.941
20501	2001	2 ⁰	6.981	39.921
23801	3301	1-1/20	8.641	48.561
29701	5901	1-3/40	18.02'	66,581
34101	4401	2-3/4°	21.11'	87.691
37451	3351	3-1/20	20.451	108.14'
40501	3051	3-1/ 2°	18.62'	126.761
43501	3001	4-1/2°	23.451	150,21
45551	2051	4-3/40	16.98	167.19'
46501	951	4-3/49	7.87'	175.061
48051	155'	6-1/2°	17.551	192.61
49901	185'	6-1/2°	20.941	213.551
5115'	125'	6-1/40	13.61'	227.16
52451	130'	6-1/40	14.15'	241.31'
53801	135'	6-1/2°	15.281	256.591
55001	1201	6-1/20	13.58'	270.17

Land Control of the C

eriseich) Machine Machine	14 Mars 2000 2000 - 19 Mars 14 450 150 <u>450</u>	(1.6 5) Cadho 1. 65 C C (1.65)	Serie (M. Serie (M.)	1402 1986 1844
The second	170 . j		47 July	* V 2
PRAS!	ે ફેંક⊌ઇ		# 177	4 (1) (2).
1500 t 1441a	"" "我们要选	9 10)	\$ \(\sigma^{\nu} \cdot \sigma^{\nu} \)	
1 A	18.524	The second of th	† ;	د د خون د
1011 - C	4.0	**************************************	Policy Service	1 17/ <u>%</u> 2
togy: N	* * * * * * * * * * * * * * * * * * *	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		5. 1 <u>.</u> 8.
850 B 100	Control of the Contro	Control of the San	4 0 65	$F = \{ \{ \{ \} \} \}$
A Company	* <u> </u>	£4/£+5	t de la composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della comp	W. Jak
" to a to to	to see S	80.44		
107. ISE	*\$5 , *1	22/2-2	1 (2)	
\$ 18 g	172.50	Si A. Erres	1(3,7)	
1. 1. 1. 1	the second			* 2
120.577	* (*) * * * * *		42°	2.5561
70 0. 193	1 . 3 . 5 . 5 . 5 . 5 . 5 . 5 . 5 . 5 . 5	36/200	* ************************************	
12 13.S	CAN LOS	3-12-c	i Çilizi	Carry ja
* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *	3 L-0	$F_{\infty}^{\infty} \propto \mathcal{F}$	19213
LE. W.	i i i u 🕳 🍇 🕻	03/2-0	164	
124 / 20	1 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	the state of	* 1 j.	
		95/26 -1	* 353	÷ 🚅 🖟

OIL CONSERVATION COMMISSION P. O. BOX 871 SANTA FE, NEW MEXICO

April 20, 1959

Pan American Petroleum Corporation P. O. Box 68 Hobbs, New Mexico

Attention: J. W. Brown

Re: Request for Exception to Rule 111 Deviation Tests, USA Malco Refineries "F" No. 1, Empire-Abo Pool.

Gentlemen:

Reference is made to your letter of April 16, 1959, concerning the above-captioned subject.

Inasmuch as the deviation survey which you have run establishes conclusively that the USA Malco Refineries "F" No. 1 Well will be bottomed on the lease where it is located, it is my opinion that the requirements of Rule 111 have been fully complied with.

Accordingly a hearing on this matter is unnecessary.

Very truly yours,

A. L. PORTER, Jr., Secretary-Director

ALP/OEP/ir

cc: Mr. M. L. Armstrong
Oil Conservation Commission
Artesia, New Mexico

OF CONSERVATION COMMISSION TO BOX TO SANTA PL. NEW MEDICO

*

ne no a la compaña de marco en la compaña de la compaña de la compaña de la compaña de la compaña de la compaña La compaña de la compaña de la compaña de la compaña de la compaña de la compaña de la compaña de la compaña d

ంగా కృషణ్ కార్యాలు కార్మాన్లు కార్యాలు కార్యాలు కార్యాలు కొర్యాలు కోర్యాలు కొర్పాడు. కోర్ శ్రీ అంటాట్లో ఉంది. కార్యాలు కోర్యాలు కోర్యాలు కోర్యాలు కోర్యాలు కోర్యాలు కోర్యాలు కోర్యాలు కోర్యాలు కోర్యాలు

ang sa matanan sa kabupatèn dan menanggalan sa kabupatèn sa kabupatèn sa kabupatèn sa kabupatèn sa kabupatèn s

eriginalista (h. 1865). Geografia

Treath out of the second of th

NEW ME CO OIL CONSERVATION CON SSION SANTA FE, NEW MEXICO

Form C-110 Revised 7/1/55

(File the original and 4 copies with the appropriate district office)

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION 1959 TO TRANSPORT OIL AND NATURAL GAS

ompany Ol	r Operator	Pan Ameri	can Patrole	um Corporati	on Lea	ase Malco Refi	neries F
ell No	Unit	Letter				Empire Abo	
ounty	eddy	Ki	nd of Lease	(State, Fed	. or Pa	tented) Feder	-81
well proc	duces oil or o	ondensate	, give loca	tion of tanks	:Unit	S 1 T 1	8 R 27
uthorized	Transporter	of Oil or	Condensate	MeWood	Corp.	(Trucks)	
.ddress	(Give addre	es to which	h approved	copy of this	form i	s to be sent)	
th a mis ad	Transporter	of Gas	-FF				
.ulnorizeu .ddmoss	Tansporter	01 000					
.daress	(Give addre	ss to whice	h approved	copy of this	form i	s to be sent)	
f Gas is n	ot being sold	, give rea	sons and al	so explain it	s prese	nt disposition:	
	ted pending m						
leasons fo	or Filing:(Ple	ase check	proper box	c) New W	Vell		
Change in	Transporter	of (Check	One): Oil) Dry Gas	() C'	head () Cond	ensate ()
Change in	Ownership			, силет	\Give	ransporter explanation be	low)
Pi	led to change	Transport	r from Con	inental Pipe	Line Go	, to McWood Go	rp, (Truck
		•					
The under	signed certif	ies that th	e Rules and	l Regulation	s of the	Oil Conservat	ion Com-
mission h	ave been com	plied with	•				
		1	W	19 59		r claned by	
Executed	this the 29	day oi	May	1,		Original Signed by	
				Ву			
	Blick	(A)			Ame = f	Superintendent	
Approved		• • • •	19	Title	VL695	Seberment	
077							
, , , , , , , , , , , , , , , , , , ,	CONSEDVA	TION COM	IMISSION	– Compa	any PAPC		
- m	CONSERVA	TION COM	IMISSION		ny PAPC		
By ////	CONSERVA Lamestro	TION COM	IMISSION	Compa Addre	ssB	ox 68	
Title	CONSERVA Comestro	TION COM	IMISSION		ssB		30

ARTESIA DIS	STRICT OF
No Copies Recui	ed 🚅
	NOTUTION
	F 19586
	:
Transport of the	
Silate used Offine	-
U, S. G. S	-
Transporter	<u> </u>
File	1

. •

•

NEW MEXICO OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

Form **G-110** Revised 7/1/55

(File the original and 4 copies with the appropriate district office) F F F

CERTIFICATE OF COMPLIANCE AND AUTHORIZATION
TO TRANSPORT OIL AND NATURAL GAS

SEP 9 1959

ompany or Operator	an American Petro	lenn Corporation	Lease ng	Malco Refineries P
ell NoUnit				: 3
ounty Eddy	Kind of Le	ase (State, re	a. or Patented_	Ties R 972
well produces oil or c	ondensate, give l	ocation of tank	s:Unit F 3 1	
uthorized Transporter	of Oil or Conden	sate Service P	ipe Line Co., Ber	337, Ridland, Tem
ldress (Give addre	1111	aved conv of thi	s form is to be	sent)
ithorized Transporter	of Gas	Validar.	D	. 1
ddress(Give addre		and convert thi	Date Connec	sent)
(Give addre Gas is not being sold	ss to which appro	oved copy of thi d also explain i	ts present dispo	sition:
Gas is not being sold,			•	
	Gas Fla			
	·			
easons for Filing:(Ple	ase check proper	box) New	Well	()
hange in Transporter	of (Check One): (Dil 🗽) Dry Ga	s () C'head (Condensate ()
hange in Ownership		_() Other	Ciara anniamat	vian balaw)
emarks:			(Give explanat	toli below)
The undersigned certification have been com	es that the Rules	and Regulation	ns of the Oil Con	servation Com-
xectied into the	uay ox	Ву	Original Sig J. W. BRO	MN weg pa
ApprovedSEF	1 0 195 9 19	Title_	ires Superinten	dent
OIL CONSERVAT	ION COMMISSIO	N Comp	any Pan American	Petroleum Corporat
34 Millmistre	ng	Addre	SS Box 68 - Heb	bs, IN
Title Mane 17	EXNOR OF THE			

The theory is a section of the sect

• 12 miles

en et en en

OIL CONSERVATION COMMISSION ARTESIA DISTRICT OFFICE No. Copies Received 36 PROPE STARLER U. S. G. ...

HEW MEXICO OIL CONSERVATION COMMISSION

Form C-110

SANTA FE, NEW MEXICO

Revised 7/1/55

[File the original and 4 copies with the appropriate district Riffed E I V E D NAME CHANGED: FROM: PAN AMERICAN SERTIFICATE OF COMPLIANCE AND AUTHORIZATIOSEP 1 9 1960
TO: AMOCO PRODUCTION CO. TOTRANSPORT OIL AND NATURAL GAS
EFFECTIVE: 2.1.71 O. C. C. EFFECTIVE: 2-1-71 Company or Operator Particular Factories Corporation Lease Tallo The Fields Well No. 1 Unit Letter L S 1 T18 R 27 Pool Pool Pool Pool County Bddy Kind of Lease (State, Fed. or Patented) If well produces oil or condensate, give location of tanks: Unit F S 1 T 128 R 278 Authorized Transporter of Oil or Condensate Eff. 4/1/70 name change from 3411 Knoxville Avenue Service to Amoco Pipeline Co. Address (Give address to which approved copy of this form is to be sent) Authorized Transporter of Gas Expire Abs Gassline Plant Address 1 Pen Davison Poter Comp., Box 68, Hobbs, N.M. Date Connected 9-3-60 (Give address to which approved copy of this form is to be sent) If Gas is not being sold, give reasons and also explain its present disposition: Effective 2-1-71 Gas Transporter Name Changed: From: Pan American Petroleum Corp. To: Amoco Production Co., Reasons for Filing: (Please check proper box) New Well Change in Transporter of (Check One): Oil () Dry Gas () C'head (x) Condensate () () Other (Give explanation below) Change in Ownership Remarks: The undersigned certifies that the Rules and Regulations of the Oil Conservation Commission have been complied with. Executed this the 14th day of September 19 60 Original Signed by J. W. BROWN Ву SEP _5 1960 Title Area Superintendent Approved 19 Company Pan American Petroleum Corporation OIL CONSERVATION COMMISSION Address Box 68 Hebbs, New Mexico 500 1 1 140 4 1 80371B

OIL CONSERVATION COMMISSION
ARTESIA DISTRICTORE
No. Cop. 1 (ved. 5) () AME. CANSPORTE ---FILE MEN OF MANS

and the state of

NEW MEXICO OIL CONSERVATION COMMISSION P. O. DRAWER DD ARTESIA, NEW MEXICO

March, 1	.968
----------	------

37.	•	1	*
No	<u> </u>	<u> </u>	

SUPPLEMENT TO THE OIL PROPATION SCHEDULE

DATE 3/1/6 8	
PURPOSE: ALLOWARLE AS	SIGNMENT (BACK ALLOWARDS)
Effective 3/1/68, back	allowable is hereby assigned to the following
Pan American Pet. Corp.	wells in the Empire Abo Pool in accordance
with Commission Order N	io. A-220.
Malco F Lease #1-L. 1-18-27, 18 bbls #2-E. ", 18 bbls #3-M. ", 18 bbls #4-F. ", 16 bbls #5-K. ", 16 bbls #6-B. ", 18 bbls #7-G. ", 18 bbls #8-C. ", 18 bbls #9-H. ", 16 bbls #11-A. ", 18 bbls #12-M. ", 18 bbls	total total total total total total total total total total total total total total Total Total TOTAL
WAG/jw	
Pan Am. Petr. Corp.	OIL CONSERVATION COMMISSION
ample 4-1-70	SUPERVISOR, DISTRICT NO. 2

EXTRA COPY

AREA SUPERINTENDENT

SIGNED

(This space for Federal or State of S

N. M. O. C. C. COPY I TED STATES SUBMIT IN THE INTERIOR (Other instruction) on Response side) RECEIVED OFFICE OF THE INTERIOR verse side)	
	5. LEASE DESIGNATION AND SERIAL N
RE GEOLOGICAL SURVEY	NM- 0557371
	6. IF INDIAN, ALLOTTEE OR TRIBE NA
MASUNDRY NOTICES AND REPORTS ON WELLS	
(Do not use this (rule) responsis to drill or to deepen or plug back to a different reservoir. (Do not use this (rule) responsis to drill or to deepen or plug back to a different reservoir. (Do not use this (rule) responsis to drill or to deepen or plug back to a different reservoir.	
. Colar	7. UNIT AGREEMENT NAME
WELL WELL OTHER	
NAME OF OPERATOR	MALCO F FEARNAL
Amoco Production Company	9. WELL NO.
3. ADDRESS OF OPERATOR	
BOX 68, HOSBS, N. M. 86240 1. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*	10. FIELD AND POOL, OR WILDCAT
See also space 17 below.) At surface	EMPIRE HED
= $(1,1,2,3,4,3,4,4,4,3,4,4,3,4,4,3,4,4,3,4,4,3,4,4,3,4,4,3,4,4,3,4,4,3,4,4,3,4$	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
1980 FSLx 660 FWL Sec 1 (Unit L, NW/4 SW/4)	1-12-27 NMDPM
	12. COUNTY OR PARISH 13. STATE
14. PERMIT NO. 15. ELEVATIONS (Show whether DF, RT, GR, etc.) 3581 R.D.B.	EDDY
	Oshor Data
Check Appropriate Box To Indicate Nature of Notice, Report, or	
NOTICE OF INTENTION TO:	QUENT REPORT OF:
TEST WATER SHUT-OFF PULL OR ALTER CASING WATER SHUT-OFF	REPAIRING WELL
FRACTURE TREAT MULTIPLE COMPLETE FRACTURE TREATMENT	ALTERING CASING ABANDONMENT*
SHOOT OR ACIDIZE ABANDON* SHOOTING OR ACIDIZING CHANGE PLANS (Other)	
(Norr : Report resul	ts of multiple completion on Well apletion Report and Log form.)
 DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dat proposed work. If well is directionally drilled, give subsurface locations and measured and true vert 	including estimated date of starting
nent to this work.) *	
Perjonations 6040-80' were acidized 15% NE acid. Évaluated & restor	ed to grad
Prior - Flw 102 BO +0 BW 24 hrs. GOR &	
REC MAY	EIVED 191972 LOGICAL SURVEY
REC MAY U. S. GEO ARTESIA 18. I hereby certify that the foregoing is true and correct AREA SUPERINTENDENT	EIVED
REC MAY U. S. GEO ARTESIA 18. I hereby certify that the foregoing is true and correct SIGNED TITLE AREA SUPERINTENDENT	EIVED 191972 LOGICAL SURVET
REC MAY U. S. GEO ARTESI 18. I hereby certify that the foregoing is true and correct SIGNED TITLE AREA SUPERINTENDENT (This space for Federal or State office use)	EIVED 191972 LOGICAL SURVEY NEW MEXICO DATE MAY 1 7 1972
MAY U. S. GEO ARTESIA 18. I hereby certify that the foregoing is true and correct SIGNED TITLE AREA SUPERINTENDENT (This space for Federal or State office use) APPROVED BY TITLE	EIVED 191972 LOGICAL SURVEY NEW MEXICO DATE MAY 1 7 1972
REC MAY U. S. GEO ARTESIA 18. I hereby certify that the foregoing is true and correct SIGNED TITLE AREA SUPERINTENDENT (This space for Federal or State office use)	EIVED 191972 LOGICAL SURVEY NEW MEXICO DATE MAY 1 7 1972
REC MAY U. S. GEO ARTESI 18. I hereby certify that the foregoing is true and correct SIGNED TITLE AREA SUPERINTENDENT APPROVED BY CONDITIONS OF THEOWER, IF ANX 4- USGS-AR	EIVED 191972 LOGICAL SURVEY NEW MEXICO DATE MAY 1 7 1972
REC MAY U. S. GEO ARTESIA 18. I hereby certify that the foregoing is true and correct SIGNED TITLE AREA SUPERINTENDENT (This space for Federal or State office 150) APPROVED BY TITLE	EIVED 191972 LOGICAL SURVEY NEW MEXICO DATE MAY 1 7 1972

Total 0+104 Supersedes Old C-104 and C-110 Difective 1-1-65

Financial Alberta Committee of the STA

REQUEST FOR ALLOWABLE

;	NTA FE.		OR ALLOWABLE	Supersedes Old C-104 and C-110 Effective 1-1-65
	U.E.		AND REDOCTION AND MATHE	PAL GAS
	s.c.s.	AUTHORIZATION TO TRAN	STOK I OIL AND NATOR	
	AND OFFICE			RECEIVED
1	HANSPORTER GAS I			0500/1000
·	PERATOR			SEP 2 6 1973
	eculot	/		O. C. C.
	Atlantic Richfi	eld Company /	Control of the Contro	ARTESIA, OFFICE
A	idress P. O. Port 1710	Hobbs, New Mexico 88240	0	
<u> </u>	coson(s) for filing (Check proper box)	nobb, no	Oluet Ortease extuan	n) Included in Empire Abo
	ew Well	Change in Transporter of:	Unit eff: 1	0-1-73. Change in lease
i	ecompletion	Oil Dry Ges		IAIÇO F Federal #1.
C	hange in Ownership $[X]$	Condens Condens	rate []	
, If	change of ownership give name d address of previous owner	AMOCO Production Com	pany P. O. Box 68,	Hobbs, New Mexico
57 TS	escription of well and L	rang	Kind	of Lease Lease No.
	ease Name	Well No. Pool Name, Including Fa	1111011011	Federal or Fee Federal
_	Empire Abo Unit K	11 Emp110 Inc		
L	ocation 7 198	South Line	660 Fee	t From The
	Unit Letter L 198	Feet From TueLin	3 (1164	
	Line of Section 1 Town	ashlp 18S Range	27E , NMPM,	Eddy County
i_				
777. <u>D</u>	ESIGNATION OF TEANSFORT	X OF OIL AND NATURAL GA	S A herens (Give address to which	ch approved copy of this form is to be sent)
	Name of Authorized Transporter of Cil AMOCO Pipe Line Com	pany	2300 Continental	Bk. Bldg., Ft. Worth, Tex. 70102
-	Name of Authorized Transporter of Casi	nghead Gas [X] or Dry Gas []	Address (Give address to white	ch approved copy of this form is to be sent)
1	AMOCO Production Con	ກາງການ	P. O. Box 68, HO	bbs, New Mexico 88240
1	If well produces all or liquids, give location of tanks.	F 1 18S 27E	yes	9-3-60
I	f this production is commingled with	n that from any other lease or pool,	give commingling order num	ber:
IV.	COMPLETION DATA	Oil Well Gas Well	New Well Workover De	eepen Plug Back Same Resty. Diff. Resty.
F	Designate Type of Completio	n = (X)		P.B.T.D.
-	Date Spudded	Date Compl. Ready to Prod.	Total Depth	P.B.1.U.
-	Elevations (DF, RKB, RT, GR, etc.)	Name of Producing Formation	Top Oll/Gas Pay	Tubing Depth
				Depth Casing Shoe
Ì	Perforations			
ļ		TUBING, CASING, AN	D CEMENTING RECORD	
1	HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
	HOLE SIZE			
		ow by y could by H Clest must be	after recovery of total volume o	f load oil and must be equal to or exceed top allo
₩.	TEST DATA AND REQUEST FOIL WELL	able for this	dench or be for full 24 nours)	
	Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pu	mp, gas sop, cross
			Casing Pressure	Choke Size
	Length of Test	Tubing Pressure		
	Actual Prod. During Test	Oil-Ebia.	Water - Ebla.	Gas - MCF
	GAS WELL Actual Prod. Test-MCF/D	Length of Test	Bbla. Condensate/MMCF	Gravity of Condensate
	Actual Prod. 1881-MC17D		Casing Pressure (Shut-in	Choke Size
	Testing Method (pitot, back pr.)	Tubing Pransure (Shat-14)		
_	TOTAL CALL OF CONTRACT SAN	NOR	OIL CO	NSERVATION COMMISSION P 28 1973
VI	. CERTIFICATE OF COMPLIAN	IUL	14	.h 88 1915
	I hereby certify that the rules and	regulations of the Oil Conservation	APPROVED	a Grand
	Commission have been complied	with and that the information give ne best of my knowledge and belie	E I SIY	1. Ly week.
	above is true and complete to d	· · · · · · · · · · · · · · · · · · ·	TITLE OIL AND G	AS INSPECTOR
			1116	The second with military

D.L.S.	Lackelfelser	<u></u>
Sr. Acctg.	Clerk	
	(Title)	
9-26-73		
#	(Date)	

This form is to be filed in comp isnce with HULE 1144.

If this is a request for allowable for a newly drilled or deepens well, this form must be accompanied by a tabulation of the deviation of taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allo-able on new and recompleted wells.

Fill out only Sections I, II, III, and VI for changes of owns well name or number, or transporter, or other such change of condition

Separate Forms C-104 must be filed for each pool in multip

ALL DESCRIPTION OF THE PERSON			Supersedes Old
151 1110 01 101			C-102 and C-103
	NEW MEXICO OIL CONSERV	NATION COMMISSION	Effective 1-1-65
S LAFE	1 The state of the	RECEIVED	and the second s
111			Su. Indicate Type of Lease -Cd
0 1 0,5,			State [A]
I NO OFFICE		NOV - 6 1978	5. Stute OH & Gua Lenne No.
	1	0 1010	5. State Off & Chia Lie inc inc
CI-HATOR 1	ا		
	and the same of th	— — O. C. C.	
SUMD:	RY NOTICES AND REPORTS OR WE	LLARTESIA, OFFICE	MANIET HILLERY
GO NOT USL THIS FORCE FOR THE	ACCOUNTS TO PRINT OF THE PRINTS OF PLES PARK.	(CHOSALS.)	7. Unit Agreement Bond
	All provides the matter of the second		1
לא רשא אין אין			Empire Abo Unit
With L	OTHER-		8. Farm of Leave Name
2 Cong of Operator			747 777
Atlantic Richfield	Company		FAU NK"
Actanities ferminates			9. 11011 1101
			17
P. O. Box 129 Arte	sia; New Mexico 88210		10. Field and Fool, or Wildeat
a stion of Well			n aha
MAIT LETTER L . 19	FERT FROM THE South	LINE AND OOC FEET FROM	Encire Aberrania
WHIT LETTER			
	1 de 1	PAUGE 27E NMPM.	AHAHAHAHAHAHA
West Line, seer	10N 1 TOWNSHIP 185	HANGE BELLES	MINITELLINIS (CONTRACTOR)
			12. County
	15. Elevation (Show whether DF	, 11, 011, 111,	Eddy Milling
	KB 3581'		300 T77777777
(1) 177777777777777777777777777777777777	All Y Training Mar	use of Norice Report or Ot	ier Data
Check	Appropriate Box To Indicate Nat	CURE CURE CURE	REPORT OF:
NOTICE OF 1	INTENTION TO:	SUBSEQUER	· Nat city of
		• —	
	PLUG AND ABANDON R	EMEDIAL WORK	ALTERING CASING
- CRM REMEDIAL WORK		OMMERCE DRILLING OPNS.	PLUG AND ABANDONMENT
FEET WHANTLY ARANDON	<u> </u>	ASING TEST AND CEMENT JOB	·
LIVE OR ALTER CASING	CHARGE PLANS	ASING TEST AND CEMENT 240	
-		OTHER	
		Pining braden head to :	surface.
HER		Piping braden head to	Surface.
The Accepted Proposited of Completed	Operations (Clearly state all pertinent details	Piping braden head to a sound five pertinent dates, including	Surface. cestimated date of starting any proposed
14 Augustine Proposed of Completed	Operations (Clearly state all pertinent details	Piping braden head to so, and give pertinent dates, including	surface. cestimated date of starting any proposed
1/. Openibe Proposed of Completed (nectk) SEE RULE 1103.	Operations (Clearly state all pertinent details	Piping braden head to so, and give pertinent dates, including	Surface. cestimated date of starting any proposed
1/. Opencribe Proposed of Completed (accid) SEE RULE 1103.		Piping braden head to so, and give pertinent dates, including	Surface. cestimated date of starting any proposed
14 Augustine Proposed of Completed		Piping braden head to so, and give pertinent dates, including	surface. e estimated date of starting any proposed
1/. Opencribe Proposed of Completed (accid) SEE RULE 1103.		Piping braden head to	surface. e estimated date of starting any proposed
1/. Opencribe Proposed of Completed (accid) SEE RULE 1103.		Piping braden head to	surface. estimated date of starting any proposed
1/. Opencribe Proposed of Completed (accid) SEE RULE 1103.		Piping braden head to so, and give pertinent dates, including	surface. cestimated date of starting any proposed
1/. Opencribe Proposed of Completed (accid) SEE RULE 1103.		Piping braden head to	surface. e estimated date of starting any proposed
1/. Opencribe Proposed of Completed (mecrk) SEE RULE 1103.		Pioing braden head to so, and give pertinent dates, including	surface. e estimated date of starting any proposed
1/. Opencribe Proposed of Completed (mecrk) SEE RULE 1103.		Piping braden head to so, and give pertinent dates, including	surface. e estimated date of starting any proposed
1/. Opencribe Proposed of Completed (mecrk) SEE RULE 1103.		Piping braden head to so, and give pertinent dates, including	surface. e estimated date of starting any proposed
1/. Opencribe Proposed of Completed (mecrk) SEE RULE 1103.		Piping braden head to so, and give pertinent dates, including	surface. estimated date of starting any proposed
Piping braden head	to surface.	s, and give pertinent dates, including	estimated date of starting any proposed
Piping braden head	to surface.	s, and give pertinent dates, including	estimated date of starting any proposed
Piping braden head	to surface.	s, and give pertinent dates, including	estimated date of starting any proposed
Piping braden head	to surface.	s, and give pertinent dates, including	estimated date of starting any proposed
Piping braden head	to surface.	s, and give pertinent dates, including	estimated date of starting any proposed
Piping braden head	to surface.	s, and give pertinent dates, including	estimated date of starting any proposed
Piping braden head	to surface.	s, and give pertinent dates, including	estimated date of starting any proposed
Piping braden head	to surface.	s, and give pertinent dates, including	estimated date of starting any proposed
Piping braden head	to surface.	s, and give pertinent dates, including	estimated date of starting any proposed
Piping braden head	to surface.	s, and give pertinent dates, including	estimated date of starting any proposed
Piping braden head	to surface.	s, and give pertinent dates, including	estimated date of starting any proposed
Piping braden head	to surface.	s, and give pertinent dates, including	estimated date of starting any proposed
Pining braden head	to surface.	s, and give pertinent dates, including	estimated date of starting any proposed
Pining braden head	to surface.	s, and give pertinent dates, including	estimated date of starting any proposed
Pining braden head	to surface.	my knowledge and belief.	estimated date of starting any proposed
Pining braden head	to surface.	my knowledge and belief.	estimated date of starting any proposed
Piping braden head	to surface.	s, and give pertinent dates, including	estimated date of starting any proposed
Pining braden head	to surface. Ion above is true and complete to the best of	my knowledge and belief. Prod. Supervisor	estimated date of starting any proposed
Pining braden head	to surface. Ion above is true and complete to the best of	my knowledge and belief. Prod. Supervisor	estimated date of starting any proposed
Piping braden head	to surface.	my knowledge and belief. Prod. Supervisor	estimated date of starting any proposed

COMMITIONS OF APPROVAL, IF ANYI

NEW MEXICO OIL CONSERVATION
 REQUEST FOR ALLOWA
. AND
RIZATION TO TRANSPORT OIL

CISTRIBUTION 6		ONSERVATION COMMISSION	Forms C=104
SANTA FE	REQUEST	FOR ALLOWABLE	Supersedes Old C-104 and C-11 Effective 1-1-65
FILE	•	AND	
U.S.G.S.	AUTHORIZATION TO TRA	NSPORT OIL AND NATURAL G	iAS
LAND OFFICE			· · · · · · · · · · · · · · · · · · ·
TRANSPORTER GAS 2		•	RECEIVED
OPERATOR /		•	MBD 4 4 1070
PRORATION OFFICE			MAR 1 4 19/9
ARCO Oil and G			
Division of At.	lantic Richfield Company		
	Watta Name Marriage 997//	1	ARTESIA, OFFICE
Reason(s) for filing (Check proper box	Hobbs, New Mexico 88240	Other (Please explain)	
New Well	Change in Transporter of:	Change in Operat	or Name
Recompletion	Oil Dry Ga	["]]	
Change in Ownership	Casinghead Gas Conder		
change of ownership give name	•		
nd address of previous owner		:	
DESCRIPTION OF WELL AND Lease Name	LEASE Well No. Pool Na.	me, Including Formation	Kind of Leise
* 1.4	1,000	re Abo	State, Federal or Fee Federal
Empire Abo Unit K	, , , , , ,	IC ADO	
	20 Feet From The South Lin	e and 660 Feet From	The West
Line of Section / , To	waship 185 Range c	27E , NMPM.	Eddy County
	TER OF OIL AND NATURAL GA	Address (Give address to which appro	ved copy of this form is to be sent)
Name of Authorized Transporter of Oil	or Condensate	Address (Give address to which appro 2300 Continental Nation	
Amoco Pipeline Compani Name of Authorized Transporter of Ca	singhead Gas (V) or Dry Gas	Ft. Worth, Texas 76102 Address (Give address to which appropriate P.O. Drawer A. Levella	ved copy of this form is to be sent)
Amoco Production Comp	any .	P.O. Drawer A, Levelland 4001 Penbrook, Odessa,	nd, Texas 79336 Texas 79760
Phillips Petroleum Com	npany Unit Sec. Twp. Rge.		en
If well produces oil or liquids, give location of tanks.	F 1 18 27	ves A	MO + P.P 9-3-60
this production is commingled wi	th that from any other lease or pool,		
Designate Type of Completi	on - (X) Gas Well Gas Well	New Well Workover Deepen	Plug Back Same Res'v. Diff. Res'v.
Date Spudded	Date Compl. Ready to Prod	Total Depth	P.B.T.D.
No Change			
Pool	Name of Producing Formation	Top Oll/Gas Pay	Tubing Depth
• 1			
Perforations			Depth Casing Shoe
·			
	TUBING, CASING, AN	D CEMENTING RECORD	
HOLE SIZE	CASING & TUBING SIZE	DEPTH SET	SACKS CEMENT
	 		
			1 - 1 1 1
TEST DATA AND REQUEST F	'OR ALLOWABLE (Test must be able for this d	after recovery of total volume of load oil epth or be for full 24 hours;	l and must be equal to or exceed top allow
OIL WELL Date First New Oil Run To Tanks	Date of Test	Producing Method (Flow, pump, gas	lift, etc.)
	34.5		
No Change Length of Test	Tubing Pressure	Casing Pressure	Choke Size
Actual Prod. During Test	Oil-Bbis.	Water-Bbls.	Gas-MCF
		<u></u>	
GAS WELL	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
GAS WELL Actual Prod. Test-MCF/D	Length of Test	Bbls. Condensate/MMCF	Gravity of Condensate
	Length of Test Tubing Pressure	Bbls. Condensate/MMCF Casing Pressure	Gravity of Condensate Choke Stize
Actual Prod. Test-MCF/D		Casing Pressure	

I hereby certify that the rules and regulations of the Oil Conservation
Commission have been complied with and that the information given
shows is true and complete to the best of my knowledge and belief.

District Prod & Drlg Supt.

(Title)

(Date)

TITLE SUPERVISOR, DISTRICT I

This form is to be filed in compliance with RULE 1104.

If this is a request for allowable for a newly drilled or deepened well, this form must be accompanied by a tabulation of the deviation tests taken on the well in accordance with RULE 111.

All sections of this form must be filled out completely for allowable on new and recompleted wells.

Fill out Sections I, II, III, and VI only for changes of owner, well name or number, or transporter, or other such change of condition.

Separate Forms C-104 must be filed for each pool in multiply

CIX

District I PO Box 1998, Hobbs, NM 88241-1998 District II PO Box 1998, Hobbs, NM 88241-1998

State of New Mexico

Eaergy, Maerah & Natural Reserves Department

Form C-104
Revised February 10, 1994
Instructions on back
Submit to Appropriate District Office
5 Copies

OIL CONSERVATION DIVISION

District II FO Drawer DD, Artesia, NM 80211-0719 District III 1000 Rio Brazos Rd., Astec, NM 97410			OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088					NC	Submit to Appropriate District Office 5 Copies AMENDED REPORT					
District IV PO Box 2008, S	ania Fe,	NM I	7564-2668	COD A	LIOWAR	l F	AND.	AIT	rhori	ZATI	ON TO TI	RANSP	ORT	
<u>I.</u>		RE	QUEST	FUK A	ne and Address	LL	AND .	<u> </u>				' OGRID	Numbe	•
ARCO Pe	rmiat	, /	`	, ,						l		0009		
A Unit of Atlantic Richfield					Co.					ſ		Resea for	Filling (Code
P.O. Bo										1	JUN 1 199	CH		
Hobbs, NM 88240				* Peel Name								, 1	val Code	
30 - 0 15-				Empire ABO								2	2040	
	Property Code						1 Propert						' W	d Number
1	147				Em	pire	e ABO t	Unit	: "K"			L		7
			ocation										-2-1	
U or let so.	Section		Towaship	Range	Lot.lda	700	t from the		North/Sec	où Liae	Feet from the	East/Vio	at Eas	Cocaty
ん	1	ı	185	278			1980)	<u>S</u>		660	<u>[</u>	1	Eddy
<u> </u>	Botto	m I	lole Loca									 _		
UL or lot so.			Township	Range	Lot Ida	Fe	et from the		North/Se	wth Eas	Feet from the	Fact/Vio		Consty
¹² Lee Code	" Pro	duda	Method Cod	de Ge	Connection De	40	4 C-129	Permi	, Number	7	C-129 Effective	Date	" C-1	29 Expiration Date
F	1	-	_	`										
III. Oil a	ind G	as 1	ransport	ers										
Tramp	orter		19	Transporter			* POD * O/G					¹³ POD ULSTR Location and Description		
OGRII		43	10CO Pip	aline	<u>., </u>		1	مادد		_		17)		
000734			OCO FIP				27	811057 0			D-10			
			evelland									<u>7 - /85</u>	<u>s-278</u>	
A 1-12 C 12 C 12		A	MOCO Pro	roduction Co.			25	2//	11047 G					
00075	6	P	.0. Box	× 68			7				F-1'-185-2			-278
7.00 to 2000 co				NM 88240				1211047 G						
009171	l		PM Gas (-			125	3//6	74/	3		1.4		
			001 Pent dessa. T	TX 79760			£ 40.		<u></u>					
	A. 16 8	l					No		100					
2.02.13							N. W. A.	15.5	1.5%	\$\$ 11 - 2 <u> </u>				······································
	rop	Wa	tter				* PC	op UI	STR Loca	dee and I	Description			~
	POD													
V. Well	Com	plet	ion Data											
	ped Dat			™ Ready	Date		л -	TD			" PSTD		•	* Perforations
1											ر د د د د د د د د د د د د د د د د د د د			
10 Hole Size M Casing & To			Casing & Tub	ing St	*			Depth S	4		- Seci	La Coment		
									<u> </u>					
														
VI. Wel	1 Tes	t D	ata	 										
	New Of			efivery Date	*	Test D	ste		" Test L	ength	" Tbg.	Pressure		³⁰ Cag. Pressure
	.		ļ	1.04		Wate			● Ge			NOF	+-	⁴ Test Method

"I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my

knowledge and belief.

Signature: Juliu	W. Munsh	Approved by: SUPERVISOR, Di	STRICT II		
Printed name: Kellie D. Mur Title: Records CLerk		Approval Date:			
Dets: 6-1-94	Phone: 505-391-1649	JUN 0 1994			
" If this is a change of opera	tor fill in the OGRID number and name of the p	revious operator			
	erator Signature	Printed Name	Title	Date	

		NM OIL CONS (COMMISSION COMMISSION FORM APPROVED
101111111111111111111111111111111111111	ED STATES	Artesia, Madgey March 31, 1993
(5422-155-)	FOF THE INTERIOR AND MANAGEMENT	5. Lease Designation and Serial No.
SUNDRY NOTICES AND Do not use this form for proposals to drill of Use "APPLICATION FOR	LC-062412 NNI 055737	
	IN TRIPLICATE	7. If Unit or CA, Agreement Designation
1. Type of Well X Oil Gas Other	\bigvee	8. Well Name and No. EMPIRE ABO UNIT"K" # 17 9. API Well No.
ARCO Permian 3. Address and Telephone No.		30-015-00703
P.O.BOX 1610, MIDLAND, TX 7970	915 688-5672	10. Field and Pool, or exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey De 1980 FSL & 660 FWL (UNIT LETT	scription)	EMPIRE ABO 11. County or Parish, State
1-18S-27E		EDDY NM
) TO INDICATE NATURE OF NOTICE, REF	PORT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF A	
X Notice of Intent	Abandonment	Change of Plans
_	Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Houtine Fracturing
	Casing Repair	Water Shut-Off
Final Abandonment Notice	Altering Casing	Conversion to Injection
	X Other ADD HORIZONTAL	(Note: Report results of multiple completion on Well
13. Describe Proposed or Completed Operations (Clearly state a give subsurface locations and measured and true ver	ll pertinent details, and give pertinent dates, including estimated da tical depths for all markers and zones pertinent to this work.)*	Completion or Recompletion Report and Log form.) te of starting any proposed work. If well is directionally drilled.
PROPOSE TO ADD HORIZONTAL DRAIN 1.POH W/PROD CA. 2.SET RETRIEVABLE WHIPSTOCK.	OTUS CURVE. HAY - 9 1995	N.M.

Title 18 U.S.C. Section 1001, 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.

PETROLEUM ENGINEER

Title AGENT

Title ____

14. I hereby certify that the foregoing is true and correct
Signed Ken W Somell

(This space for Federal or State office use)
Approved by (ORIG. SQD.) JOE G. LARA
Conditions of approval, if any:

HORIZONTAL SIDETRACK PROCEDURE

DATE: May 1, 1995

COUNTY: Eddy, NM WELL: Empire Abo #K-17 DRILLED: 1959 FIELD: Empire Abo

BY: P.N. Drennon TD: 6,137' **PBD:** 6,101' DATUM: 12' KB

SX CMT **TOC WEIGHT GRADE** SET @ CASING: J-55 J-55 surf-circ SURFACE: 24# 1.000 surf-circ PROD:

PERFORATIONS: Open perfs: Abo 6.040'-6.080'

HISTORY AND BACKGROUND: Drilled in 1959, completed as a flowing oil well from the Abo.

SCOPE OF WORK: Set retrievable whipstock, sidetrack and drill 250' radius build curve, 1,000' horizontal lateral, retrieve whipstock, complete as flowing/pumping well from existing Abo perfs and new horizontal lateral.

TARGET INFORMATION:

Whipstock Depth:

5.810

Kickoff Point: Azimuth:

Same as above E (90º)

Target Depth:

6,060 Total 1.250'

Planned Displacement: Surface Lacation:

1,980' FSL, 660' FWL, Sec. 1, T-18-S, R-27-E, Eddy Co., N.M.

PROCEDURE

- MIRU PU, pump, swivel, pits. Install H₂S safety equipment. Pull rods and pump, warehouse same. ND 1. tree, NU BOPE. Pull tubing, LD and warehouse.
- PU 4 3/4" bit and scraper, 10 3-1/2" DC, 2 7/8" AOH DP, TIH to PBTD 6,101, circulate @ TD if 2. necessary. RU & run gyro multi-shot survey via DP. RD survey equipment, TOOH, LD bit and scraper.
- GIH w/ packer and set in vicinity of 5,800'. 3.
- Test casing and stack to 750 psig. 4.
- PU anchor, whipstock assembly w/ starter mill, BHA, TIH, hydraulically set anchor @ 5,810'. 5.

Note: Oriented assembly, azimuth E (compass 90°) per O/A Engineer (Gary Smallwood).

- Shear off whipstock assembly w/ starter mill. Mill out casing and shear bolt assembly to start 6. window, use Abo produced water for circulation. Use polymer additions for additional lift if necessary.
- TOOH, LD starter mill, PU window mill, 1 jt S-135 AOH DP, BHA, TIH. 7.
- Finish cutting window, drill out into open hole, circulate clean. 8.
- TOOH, LD window mill and inspect for proper wear. PU window mill, watermelon mill, 9. BHA.

Note: Air/foam package to be on location at this point.

TIH, clean and dress window, drill 8-10' formation, circulate clean. 10.

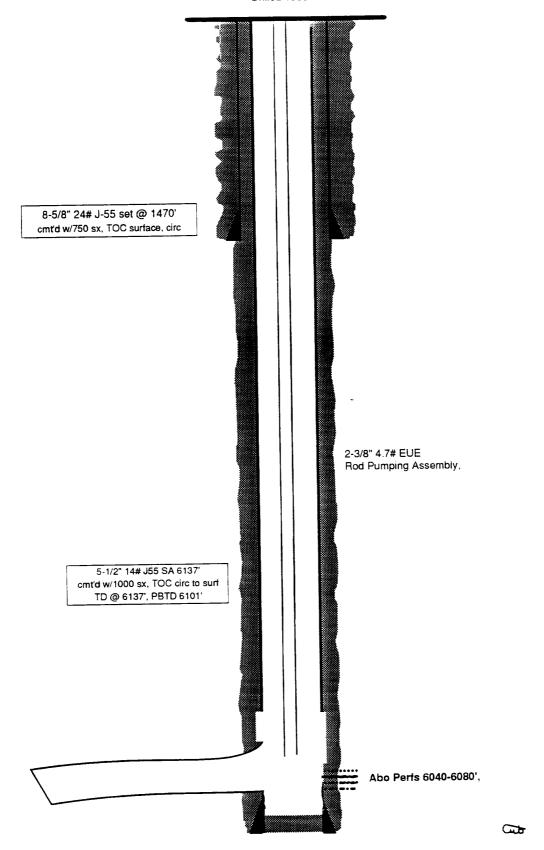
- 11. TOOH, LD window and watermelon mills, check for proper wear. PU 4 ¾" drag bit, bent housing motor, bent sub, non-mag DC, 2 7/8" 8.7# PH-6 tbg DC's (minimum 2 DC's in casing @ TD of build curve), TIH.
- 12. Displace hole w/ stiff foam (expect 700-800 SCF/min w/ 1.75 BPM water w/ 8-10 gal/1000 foamer).
- 13. RU wet connect, steering tool, land same, drill build curve, plan to drill 23º/100' build rate (radius 250') to max angle of 87º- 90º- from vertical.
- 14. RD steering tool/wet connect, TOOH, LD build motor, PU packer on DP, TIH, set packer @ ±5,700'.
- 15. Open by-pass, jet via DP to kick-off and test production from build curve. If necessary, polymer squeeze build curve to shut off excess gas production.
- 16. TOOH, LD packer, PU 4 ¾" bit, hold motor, Monel DC, 2 7/8" tbg. DC's (minimum 9 DC's in casing @ TD), DP, TIH, RU wet connect, steering tool, land same drill lateral ±1,000' due East. All drilling done w/ stiff foam.
- 17. TOOH, LD BHA, PU tbg to go to end of lateral, DP, TIH.
- 18, Stage in and blow hole w/ air to unload foam, @ EOC blow hole dry, load to kill w/ prcduced water, TOOH.
- 19. PU CA and production tubing, TIH.
- 20. Swab to KO well, test.
- 21. Kill well w/ produced water, TOOH w/ CA.
- 22. PU die collar, 4 3 1/2" DC, tubing, TIH, latch and release packer stock, TOOH, LD packer stock, die collar, DC's.
- 23. TIH w/ CA and production tubing.
- 24. Swab to KO well, test.
- 25. If recommended, TIH to EOL w/ 1 1/4" coil tubing, spot 15% HCl w/ adds throughout lateral, POOH w/ coil tubing.
- 26. Swab to KO well, test.
- 27. TOPS

P. N. Drennon	J. E. Shields

EMPIRE ABO K-17

Proposed Status

Drilled 1959



OIL CONS COMMESSION

Form 3160-5 (June 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR

Drawer DD Artesia, NM Burgersingau No. 1004-0135
Expires: March 31, 1993

Expires: March 31, 1993
Lease Designation and Serial No.
LC-062412

BUREAU OF L	AND MANAGEMENT	3. Lease Designation and Serial No.
SUNDRY NOTICES AND	DEDODTS ON WELLS	LC-062412
		6. If Indian, Al ottee or Tribe Name
Do not use this form for proposals to drill or		
Use "APPLICATION FOR	PERMIT - " for such proposals	
	THE PROPERTY AND ADDRESS OF THE PARTY AND ADDR	7. If Unit or CA, Agreement Designation
SUBMIT	IN TRIPLICATE	89101380 0
1. Type of Well		
X Oil Gas Well Other		8. Well Name and No.
2. Name of Operator	/	EMPIRE ABO UNIT K-17
ARCO Permian	1/	9. API Well No
3. Address and Telephone No.		30-015-00703
P.O. Box 1710 Hobbs, N.M. 88240	505-391-1649	10. Field and Pool, or exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey Des	ecription)	EMPIRE ABO
1980' FSL & 660' FWL, Unit Letter L		11. County or Farish, State
Sec. 1, T18S, R27E		
,,		EDDY NM
12. CHECK APPROPRIATE BOX(s)	TO INDICATE NATURE OF NOTICE, REPORT	T, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	
TYPE OF SUBMISSION		
Notice of Intent	Abandonment	Change of Plans
	Recompletion	New Construction
X Subsequent Report	Plugging Back	Non-Routine Fracturing
	Casing Repair	Water Shut-Off
Final Abandonment Notice	Altering Casing	Convers on to Injection
	X Other ACIDIZE HORIZONTAL	Dispose Water
	Outer	(Note: Report r sults of multiple completion on W
	ll pertinent details, and give pertinent dates, including estimated date of sta	Completion or Recompletion Report and Log form
 Describe Proposed or Completed Operations (Clearly state at give subsurface locations and measured and true ver 	tical depths for all markers and zones pertinent to this work.)*	- Ing Inc. proposed to the control of the control o
	CIBP ABOVE PERFS @ 5823'. WHIPSTOCK @ 5782'.	
TOP OF WINDOWS @ 5797', BOTTOM OF	WINDOW @ 5803'. hORIZONTAL 5800-7705'	
ACCOUNT OF THE PROPERTY AND PRO	TTION 5800-7705 W/2500 GALS 15% NEFE ACID AND 25	ON CALS
06/21/95; ACIDIZE HURIZUNTAL EXTEN	ENSATE WHILE MOVING C.T. ALONG HORIZONTAL	FLUSH W/20 BPW.
COMPENSATE: DISTENCED NOID COMP		
	The second secon	
	ACCEPTED FOR RECORD	
RECENT CEP 12	WEIT	D C
RESE	y fara	6 6
	\mathcal{O} 8 1995	70 70
000 12	1995	វិធី
SET IA	the control of the co	erroman, light
_ 0	N. DIV. MARKED AW WILL	
an COI	No DI Vo	1-44
	7 ¹ 7)	Special Control of Con
DIST	la Co	
		S
14. I hereby and if that the formation in taxo and as-most		
14. I hereby certify that the foregoing is true and correct	Title Administrative Assistant	(8/15/95
Signed / Clear W. // HIME	111111111111111111111111111111111111111	Date
(This space for Federal or State office use)		

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, licitious or fraudulent statements or representations as to any matter within its jurisdiction.

__ Title _

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

SPECIFIC INSTRUCTIONS

Item 4 - If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 13 - Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et. seq., 25 U.S.C. et. seq.; 43 CFR 3160.

PRINCIPAL PURPOSE - The information is to be used to evaluate, when appropriate, approve applications, and report completion of secondary well operation, on a Federal or Indian lease.

ROUTINE USES:

- (1) Evaluate the equipment and procedures used during the proposed or completed subsequent well operations.
 - (2) Request and grant approval to perform those actions covered by 43 CFR 3162.3-2(2).
 - (3) Analyze future applications to drill or modify operations in light of data obtained and methods used.
- (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION - Filing of this notice and report and disclosure of the information is mandatory once an oil or gas well is drilled.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.) requires us to inform you that:

This information is being collected in order to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

This information will be used to report subsequent operations once work is completed and when requested, to obtain approval for subsequent operations not previously authorized.

Response to this request is mandatory only for the specific types of activities specified in 43 CFR Part 3160.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 18 and C Streets, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0135), Washington, D.C. 20503.

Form 3160-5 (June 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993

	AND MANAGEMENT	5. Lease Designation and Serial No.		
SUNDRY NOTICES AND Do not use this form for proposals to drill or Use "APPLICATION FOR P	LC-962412 NW -055737 6. If Indian, Allettee or Tribe Name			
SUBMIT I	N TRIPLICATE	7. If Unit or CA. Agreement Designation		
Type of Well Oil Well Other		8. Well Name and No.		
2. Name of Operator		EMPIRE ABC UNIT"K" 17		
ARCO Permian		9. API Well No.		
 Address and Telephone No. P.O.BOX 1610, MIDLAND, TX 79702 Location of Well (Footage, Sec., T., R., M., or Survey Desc 	915 688-5672	30-015-00703 10. Field and Pocl, or exploratory Area EMPIRE ABO		
1980 FSL & 660 FWL(UNIT LETTE		11. County or Parish, State		
1000 102 & 000 12(0 22.1.2	-,			
1-18S-27E		EDDY NM		
2. CHECK APPROPRIATE BOX(s)	TO INDICATE NATURE OF NOTICE, REPOR	T, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTIO	N		
Notice of Intent	Abandonment	Change of Plans		
	Recompletion	New Construction		
Subsequent Report	Plugging Back	Non-Routine Fracturing		
	Casing Repair	Water Shut-Off		
Final Abandonment Notice	Altering Casing	Conversion to Injection		
	X Other ADD HORIZONTAL EX	(Note: Report results of multiple completion on Well		
. Describe Proposed or Completed Operations (Clearly state all give subsurface locations and measured and true verti	pertinent details, and give pertinent dates, including estimated date of st cal depths for all markers and zones pertinent to this work.)*	Completion or Recompletion Report and Log form.) tarting any proposed work. If well is directionally drille		
W/WHIPSTOCK. RAN GYRO SURVEY F/S 6' WINDOW IN 5 1/2 CSG(5797-5803	RIH W/4 3/4 BIT TO 6099 PBD. SET CI SURF-5798. SET WHIPSTOCK PKR ASSEMB B). DIRECTIONAL DRILLED TO 7705 MD. D 5906. PKR SET AT 5772. RDPU 06-13	LY AT 5812. CUT		
		DEC 1 8 1995		
		OIL COM. DIV.		
	BEC A	DIST. 2		
14. I hereby certify that the foregoing is true and correct Signed Rem W Somul	Title AGENT	Date 11-16-95		
(This space for Federal or State office use)				
(This space for Federal or State office use) Approved by Conditions of approval, if any:	Title	Date		

====== EAGLE DIRECTIONAL SERVICES, INC =======

Date: 6/8/1995 Time: 7:28: 6 PAGE: 1
Filename: "ARCO.SRV" Description: "ARCO PERMIAN EMPIRE ABO UNIT K17 RE-ENTRY HORIZONTAL WELL NW/4 SW/4 SEC 1 T18S R27E EDDY COUNTY, NEW MEXICO

Target Coordinates: 23.6 N 1064.3 E Target TVD: 6048.600

Using Minimum Curvature Method.

					TRUE				
S	MEASURED	DRIFT	DRIFT	COURSE	VERTCAL	VERTCAL	RECTANG	ULAR D	OGLEG
#	DEPTH	ANGLE	DIRECTION	LENGTH	DEPTH		COORDIN		ERITY
	(feet)	(deg)	(deg)	(feet)	(feet)	(feet)	(feet		100FT
	-		,	,		,,	(1000	, , ,	
0	5700.0	5.15	346.670	0.0	5689.8	0.0	210.9 N	168.9 W	0.00
1	5798.0	4.73	350.130	98.0	5787.5	-165.7	219.2 N	170.6 W	0.53
2	5828.0	8.60	48.200	30.0	5817.3	-164.2	221.9 N	169.1 W	
3	5857.0	17.10	64.500	29.0	5845.6	-158.6	225.2 N	163.7 W	
4	5887.0	23.60	76.700	30.0	5873.7	-148.7	228.5 N	153.8 W	
5	5918.0	27.90	93.300	31.0	5901.6	-135.4	229.5 N	140.5 W	26.96
6	5948.0	33.70	97.900	30.0	5927.4	-120.2	228.0 N	125.3 W	
7	5979.0	42.70	97.000	31.0	5951.7	-101.2	225.5 N	106.3 W	
8	6011.0	51.40	95.200	32.0	5973.5	-78.0	223.0 N	83.0 W	
9	6043.0	59.60	96.100	32.0	5991.6	-51.9	220.4 N	56.8 W	
10	6074.0	58.70	97.300	31.0	6007.5	-25.5	217.3 N	30.3 W	4.41
11	6106.0	64.20	100.300	32.0	6022.8	2.1	213.0 N	2.6 W	19.06
12	6136.0	69.40	105.500	30.0	6034.6	28.8	206.8 N	24.3 E	23.54
13	6167.0	76.70	106.200	31.0	6043.7	57.2	198.7 N	52.8 E	
14	6198.0	84.00	104.500	31.0	6048.9	86.4	190.7 N	82.2 E	24.16
15	6230.0	87.00	103.700	32.0	6051.4	117.2	182.9 N	113.2 E	9.70
16	6262.0	87.70	103.200	32.0	6052.8	148.1	175.5 N	144.2 E	2.69
17	6293.0	87.80	103.700	31.0	6054.1	178.1	168.2 N	174.4 E	1.64
18	6323.0	88.10	104.700	30.0	6055.1	207.0	160.9 N	203.4 E	3.48
19	6355.0	87.80	105.200	32.0	6056.3	237.7	152.6 N	234.3 E	1.82
00	0005 0	00.10	100 100						
20	6387.0	86.10	103.100	32.0	6058.0	268.5	144.8 N	265.3 E	8.44
21	6418.0	86.00	103.200	31.0	6060.1	298.4	137.8 N	295.4 E	0.46
22	6450.0	85.70	103.200	32.0	6062.4	329.3	130.5 N	326.5 E	0.94
23	6481.0	85.70	103.300	31.0	6064.8	359.2	123.4 N	356.6 E	0.32
24	6512.0	87.20	101.700	31.0	6066.7	389.3	116.7 N	386.8 E	7.07
25	6544 0	07 00	101 000	20.0	0000	400 =			
26	6544.0 6574.0	87.00 86.50	101.000	32.0	6068.3	420.5	110.4 N	418.1 E	2.27
27	6604.0		100.800	30.0	6070.0	449.8	104.8 N	447.5 E	1.79
28	6636.0	86.50	100.900	30.0	6071.8	479.0	99.1 N	477.0 E	0.33
29		88.00	99.300	32.0	6073.4	510.4	93.5 N	508.4 E	6.85
43	6666.0	87.70	99.000	30.0	6074.5	539.9	88.8 N	538.0 E	1.41
30	6697.0	87.40	99.200	31.0	6075.8	570.3	83.9 N	568.6 E	1.16
31	6758.0	88.10	99.400	61.0	6078.2	630.2	74-0 N	628.7 E	1.16
32	6819.0	88.10	100.200	61.0	6080.2	690.1	63.6 N	688.8 E	1.19
33	6848.0	87.90	100.300	29.0	6081.2	718.5	58.5 N		0.77
34	6909.0	88.80	98.400	61.0	6083.0	778.4	38.5 N 48.6 N	717.3 E	
35	6939.0	88.50	98.500	30.0	6083.7	808.0		777.5 E	3.45
00	0000.0	50.50	50.500	30.0	0000.7	000.0	44.2 N	807.2 E	1.05

					TRUE					
S	MEASURED	DRIFT	DRIFT	COURSE	VERTCAL	VERTCAL	RECTAN	GULAR	ח	OGLEG
#	DEPTH	ANGLE	DIRECTION	LENGTH	DEPTH	SECTION	COORDI			ERITY
	(feet)	(deg)	(deg)	(feet)	(feet)	(feet)	(fee			
	, ,	((= -6)	(1000)	(1000)	(reet)	(166	L)	DG/	100FT
36	7001.0	89.60	98.300	62.0	6084.7	0.00 1	25 1 1	0.00		
37	7062.0	86.60	95.700	61.0		869.1	35.1 N	868.		1.80
38	7152.0	89.80			6086.8	929.4	27.7 N	929.) E	6.51
			96.500	90.0	6089.6	1018.6	18.1 N	1018.	4 E	3.66
39	7214.0	91.30	96.300	62.0	6089.0	1080.0	11.2 N	1080.0	0 E	2.44
40	7276.0	92.40	96.100	62.0	6087.0	1141.5	4.5 N	1141.0		1.80
										1.00
41	7336.0	92.60	96.500	60.0	6084.4	1200.9	2.1 S	1201.	2 F	0.74
42	7362.0	92.90	96.400	26.0	6083.1	1226.6	5.0 S	1227.0		
43	7427.0	92.20	97.100	65.0	6080.2	1290.9				1.22
44	7458.0	90.00	97.600	31.0	6079.6		12.6 S	1291.5		1.52
45	7520.0	88.30	97.700			1321.6	16.6 S	1322.3		7.28
40	7320.0	00.00	31.100	62.0	6080.6	1382.8	24.8 S	1383.7	7 E	2.75
46	7583.0	87.10	00 100	20 0						
			98.100	63.0	6083.1	1444.9	33.5 S	1446.0) E	2.01
47	7641.0	86.40	98.500	58. 0	6086.4	1502.0	41.8 S	1503.3	3 E	1.39
48	7672.0	85.80	98.900	31.0	6088.5	1532.5	46.5 S	1533.9		2.32
	Survey #4	1 9 is P	rojected to	TD!				20.50.0		2.02
49	7705.0	85.20	98.900	33.0	6091.1	1564.9	51.6 S	1566.4	. E	1 00
						1004.0	01.0 3	1000.4	* IC	1.02

⁻⁻⁻ Final Closure Direction: 91.887 --- Final Closure Distance: 1567.266 feet

SCIENTIFIC DRILLING INTERNATIONAL - MIDLAND, TEXAS

Finder Survey for

ARCO OIL & GAS COMPANY MIDLAND, TEXAS

Job Number

: 32F0595215

Well Number

: EMPIRE ABO "K" NO. 17

Site Location

: EDDY COUNTY, NEW MEXICO

Latitude

: 32.750

Survey Date(s)

: 24-MAY-95

S.D.C. personnel : GARY DESPAIN

Calculation Method : Minimum Curvature Survey Depth Zero : RKB

Proposal Direction: 99.000

Depth Unit

Feet

Comments :

Inrun Survey ARCO OIL & GAS COMPANY page 1

Well number : EMPIRE ABO "K" NO.

Date : 24-MAY-95

Measured	Vertical	Vert.	Tinc	Azimuth	0			
Depth	Depth	Section	Deg			inates	D-leg	
					-atitude	Departure	/100ft	
0.0	0.00	0.0	0.00	0.00	0.00	2 22		
	100.00	-0.1	0.26		0.21			
200.0			0.24			0.00		
300.0		-0.6	Ø 31	329.92			0.02 0.08	
400.0	400.00	-1.1	0.41	315.24	1.53	-0.86		
						0.00	e.14	
500.0	499.99	-1.7		316.06	2.08	-1.40	0.07	
500.0	599.99	-2.5	0.60	308.21	2,71		0.14	
700.0	699.98 799.97	-3.6	0.77	290.57	3.27			
800.0	799.97	-5.1	1.00	281.40	3.68			
900.0	899.94	-7.3	1.47	287.75	4.24	-6.70		
1000 0	000.00							
1000.0 1100.0	999.90	-10.0	1.75	293.11	5.23	-9.33	0.32	
1200.0	1100 01	-12.9	1.76	300.33				
1300.0	1200 20	-15.8	1.82	301.42		-14.74	0.07	
1400.0	1233.70	-18.7	1.84	305.46	9.97	-17.40	0.13	
1400.0	1333.71	-21.6	1.85	307.40	11.88	-19.99	0.06	
1500.0	1499.65	-24 4	1 00	700 17			· 一种:	t
			1.84	309.17		-22.53		
	1699.55		1.85	309.49 306.69	15.93	-25.03	Ø . Ø 2	
1800.0	1799.50	-32.9	1 90	305.11	17.32	-27.56 -30.21	0.09	
1900.0	1899.44	-35.9		298.32	71 55	-30.21	0.07	
				230.32	21.55	-32.98	0.23	
2000.0	1999.39	-39.0	1.80	295.41	22.99	-35.82	0.10	
2100.0	2099.34	-42.0	1.76	292.14	24.24	-38.66	0.11	
2200.0	2199.30	-44.9	1.63	289.34	25.29	-41,42	0.15	
2300.0	2299.26	-47.7	1.61	285.57	25.29 26.14	-44.12	0.11	
2400.0	2399.22	-50.5	1.65	289.24	26.39	-46.83		
							••••	
2500.0	2499.18			292.86	28.06		0.16	
2500.0	2599.13	-56.4	1.81	295.13	29.33 30.78	-52.46	0.08	
	2699.07				30.78	-55.38	0.13	
	2799.02			298.76	32.38 34.14	-58.38	0.07	
2900.0	2898.95	-66.0	2.09	300.78	34.14	-61.46	0.13	*
3000.0	2998.88	~69.5	2 10	704 51	76 (5	24 22	.	
3100.0	3098.81			304.51 307.13				
3200.0	3198.72			_	38.44	-67.76	0.15	
	3298.63			308.70		-70.99	0.14	
3400.0	3398.52	-84.2		310.17	43.71		0.16	
5700.0	2000.32	-04,4	2.01	מַס.שוכ	46.67	-77.81	0.11	
3500.0	3498.41	-88.3	2.92	310.46	49 84	-81.52	0.25	
	3598.27			311.16	49.84 53.27	-05.48	0.25	
3700.0					56 84	-89.64	0.17	
3800.0	3797.95			313.04	56.84 60.64	-93.91	0.24	
		· • -	·		~~! ~	30.31	V147	

Incun Survey ARCO OIL & GAS COMPANY

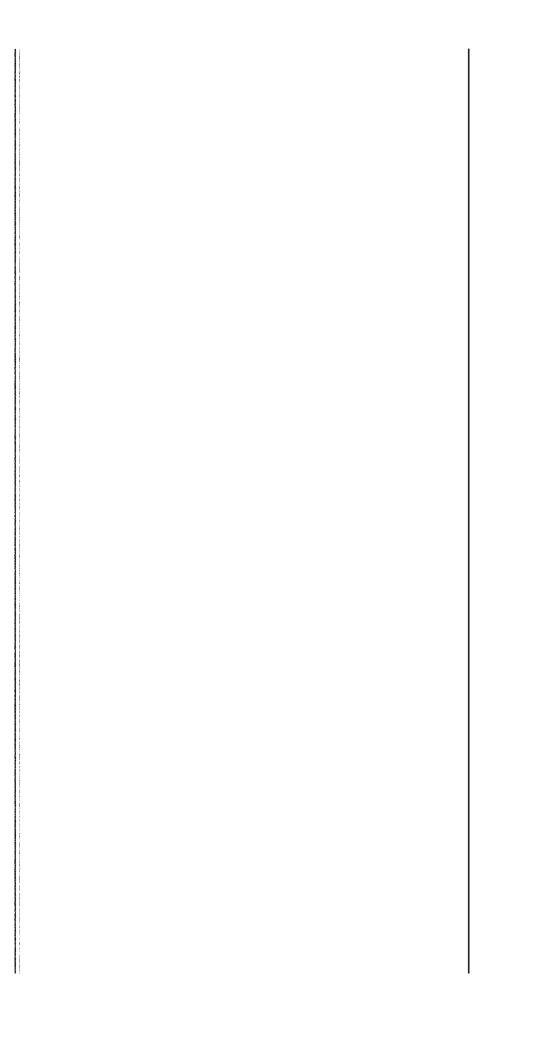
Date : 24-MAY-95

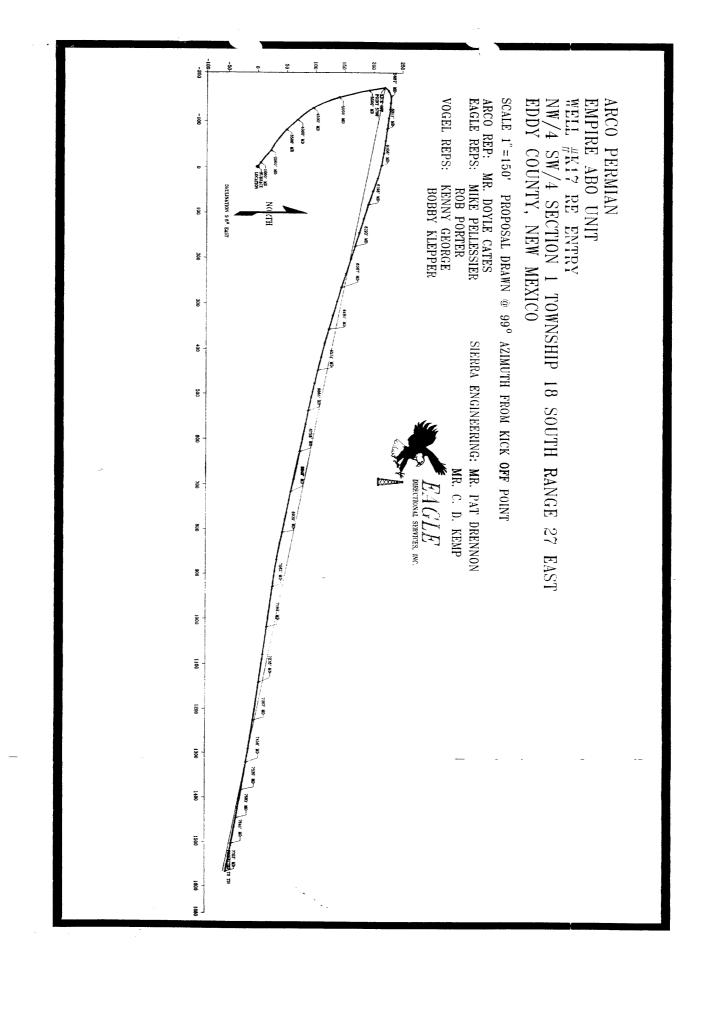
page 2

М	easured	Vertical	Vert.	Inc	Azimuth	Coordi		D-leg
	Dapth	Depth	Section	Deg	Deg	Latitude	Departure	/100ft
						North	West	<u></u>
•	3900.0	3897.77	-107.2	3.50	313.09	64.73	-98.29	0.13
	4000.0	3997.58	-112.4	3.68	312.42	68.98	-102.89	0.18
	4100.0	4097.36	-117.9	3.94	312.80	73.48	-107.78	0.26
	4200.0	4197.11	-123.8	4.17	313.98	78.34	-112.91	0.24
	4300.0	4296.82	-129.9	4.48	316.34	83.69	-118.23	0.36
	4400.0	4396.50	-136.1	4.72	319.48	89.64	-123.60	0.35
	4500.0	4496.15	-142.2	4.80	324.09	96.16	-128.72	0.39
	4600.0	4595.77	-148.1	5.19	327.23	103.35	-133.62	0,48
	4700.0	4695.33	-154.1	5.63	332.27	111.50	-138.35	0.65
	4800.0	4794.80	-159.9	6.14	336.90	120.76	-142.74	0.70
	4900.0	4894.21	-165.7	6.29	336.37	130.69	-147.03	0.16
	5000.0	4993.62	-171.3	6.22	339.19	140.78	-151.15	0.32
	5100.0	5093.05	-176.4	5.04	341.67	150.84	-154.73	0.32
and the second second second	5200.0	5192.48	-181.1	6.11	343.75	160.94	-157.87	0.23
	5300.0	5291.91	-185.6	5.21	345.12	171.28	-160.75	0.18
	5400.0	5391.34	-189.5	5.96	348.94	181.60	-163.14	0.48
	5500.0	5490.80	-192.9	5.98	351.26	191.84	-164.92	0.24
	5600.0	5590. 29	-196.3	5.64	347.36	201.78	-186.79	0.52
	5700.0	5689.84	-199.8	5.15	346.67	210.95	-168.90	0.49
	5798.0	578 7.48	-202.8	4.73	3 50. 13	219.21	-170.61	0.53

At Bottom Hole Location: Measured Depth Horiz. Displ. Closure Dir. = 5798.0 = 277.775 = 322.107

Wall number : EMPIRE ABO "K" NO.





Form 3160-4

UNITED STATES

FORM APPROVED OMB NO. 1004-0137

11-16-95

DATE

SUBMIT IN DUPLICATE* (July 1992) Expires: February 28, 1995 (See other in-DEPARTMENT OF THE INTERIOR structions on reverse side) 5. LEASE DESIGNATION AND SERIAL NO. **BUREAU OF LAND MANAGEMENT** LC-062412 NM-055 6. IF INDIAN, ALLOTTEE OR TRIBE NAME **WELL COMPLETION OR RECOMPLETION REPORT AND LOG*** Oth 1a. TYPE OF WELL: OIL X 7. UNIT AGREEMENT NAME b. TYPE OF COMPLETION: DEEP-WORK | HORIZONTAL EXT NEW WELL PLUG 8. FARM OR LEASE NAME, WELL NO. OVER EMPIRE ABO UNIT"K" 17 2. NAME OF OPERATOR 9. API WELL NO. ARCO PERMIAN 30-015-00703 3. ADDRESS AND TELEPHONE NO. 915 688-5672 P.O.BOX 1610, MIDLAND, TX 79702 10. FIELD AND POOL, OR WILDCAT 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) **EMPIRE ABO** 11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA 1980 FSL & 660 FWL (UNIT LETTER L)
At top prod. interval reported below 1-18S-27E 12. COUNTY OR PARISH 14. PERMIT NO. DATE ISSUED 13. STATE 1928 FSL & 2216 FEL **EDDY** 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 19. ELEV, CASINGHEAD 15. DATE SPUDDED 06-13-95 05-22-95 06-08-95 20. TOTAL DEPTH, MD & TVD 21. PLUG, BACK T.D., MD & TVD 22. IF MULTIPLE COMPL., HOW MANY* 23. INTERVALS ROTARY TOOLS CABLE TOOLS 7705 MD 6091 24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TV 25. WAS DIRECTIONAL SURVEY MADE YE'S 5797-7705 **ABO** 27. WAS WELL CORED 26. TYPE ELECTRIC AND OTHER LOGS RUN NO CASING RECORD (Report all strings solin 28. CASING SIZE/GRADE DEPTH SET (MD) AMOUNT PULLED WEIGHT, LB./F 24 12 1/4 0 14 6137 7 7/8 CIRC 1/2 TUBING RECORD LINER RECORD PACKER SET (MD) SIZE TOP (MD) BOTTOM (MD) SACKS CEMENTS SCREEN (MD) DEPTH SET (MD) 2 3/8 5906 31. PERFORATION RECORD (Interval, size 5797-7705 OH ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC AMOUNT AND KIND OF MATERIAL USED DEPTH INTERVAL (MD) 5797-7705 A W/1700 GALS PRODUCTION 33.* WELL STATUS (Producing or PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump) DATE FIRST PRODUCTION 06-13-95 CHOKE SIZE PROD'N. FOR TEST PERIOD GAS - MCF. WATER - BBL DATE OF TEST HOURS TESTED CALCULATED 24-HOUR RATE OIL - BBL. GAS - MCF. WATER - BBL. OIL GRAVITY - API (CORR.) FLOW. TUBING PRESS. CASING PRESSURE 34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) TEST WITNESSED BY 35. LIST OF ATTACHMENTS **DIRECTIONAL SURVEY**

*(See Instructions and Spaces for Additional Data on Reverse Side)

tion is complete and correct as determined from all available records

Title 18 U.S.C. Section 1001, 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 jurisdicton.

TITLE AGENT

N.M. OH CATIS, LANGUAGE

1301 W. Grand (1972)

Form 3160-5 (June 1990)

DEPARTMENT OF THE INTERIOR 10512, NW 0821 BUREAU OF LAND MANAGEMENT

FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993

5. Lease Designation and Serial No. NM0557371

SUNDRY NOTICES AND REPORTS ON WELLS	SUNDRY	NOTICES	AND	REPORTS	ON	WELLS
-------------------------------------	--------	---------	-----	---------	----	-------

Do not use this form for proposals to drill or t	to deepen or reentry to a different reservoir.	6. If Indian, Allottee or Tibe Name
Use "APPLICATION FOR PE	FRMIT - * for such proposals	
SUBMIT IN	TRIPLICATE	7. If Unit or CA, Agreement Designation 8910138010
1. Type of Well X Oil Gas Well Other 2. Name of Operator ARCO Permian		8. Well Name and No. Empire Abo Unit "K" 17
3. Address and Telephone No.		30-015-00703
P.O. Box 1089, Eunice, NM 88231	505-394-1649	10. Field and Pool, or exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey Descriptio	n)	Empire Abo
Unit Letter L, 1980' FSL & 660' FWL		
Section 1, T18S, R27E		11. County or Parish, State
<u> </u>		Eddy NM
12. CHECK APPROPRIATE BOX(s)	TO INDICATE NATURE OF NOTICE, REPO	ORT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	N
Notice of Intent Subsequent Report Final Abandonment Notice	Abandonment X Recompletion Plugging Back Casing Repair Altering Casing Other	Change of Plans New Construction Non-Rowline Fracturing Water Shut-Off Conversion to Injection Dispose Vlater (Note: Report results of multiple completion on W Completion or Recompletion Report and Log for
3. Describe Proposed or Completed Operations (Clearly state all pegive subsurfacelocations and measured and true vertical d TD: 6137' PBD: 6101' PERFS: 5800- MIRUPU. POH w/rods & pmp. NDWH. NUBL RIH w/4-3/4" bit & scraper to top of w	7705' OP. Release TAC @ 5705'. POH w/tbg & 1	

RUWL. GIH w/CIBP & set @ 5770'. POH. GIH w/PPI tools & breakdown perfs f/5472-5736' w/50 gals/ft. 15% HCL NEFE. POH.

RIH w/bull plugged MA, perf sub, SN & 2-3/8" tbg. Land SN at \pm - 5736'.

NDBOP. NUWH. Swab for test. GIH w/GA, pmp & rods. Hang well on. RDPU. RTP.

•		
4. I hereby certify that the foregoing is true and correct Signed	Title Sr. Administrative Assistant	Date 01/08/02
(This space for Federal or State office use)		
Approved byConditions of approval, if any:	Title	Date ————

Title 18 U.S.C. Section 1001, 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 statem or representations as to any matter within its jurisdiction.

10410 TEMSON INB 60:6 NM 6-187 7017 CENEDAY District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV. 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

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

Submit 1 copy of the final affected wells list along with 1 copy of this form per

Form C-104A

March 19, 2001

number of wells on that list to appropriate District Office

Change of Operator

Pre	vious Operator Information:	New Operator Information:			
		Effective Date:	12/31/2001		
OGRID	:000900	New Ogrid:	000778		
	ARCO Permian	New Name:	BP America Production Company		
	P.O. Box 3092	Address:	P.O. Box 3092		
Address		Address:			
City, State, Zip	: Houston, Texas 77253	City, State, Zip:	Houston, TX 77253		
orm and the atta New Operator Signature: Printed name: Title:	that the rules of the Oil Conservation Division ached list of wells is true and complete to the Mary Corley Mary Corley Sr. Regulatory Specialist 12/10/2001 Phone: 281-366-449	best of my knowledg			
Previous operat	for complete below:]	NMOCD Approval		
Previous					
Operator:	ARCO Permian	Signature: 4	in W. Sem		
Previous		Printed	interest Separation		
OGRID:	000990	Name:	which Exercise		
Signature:	Mary Carley	D			
	Mary Corley	Date:	FEB 0 7 2002		
-					

N.M. Cil Con Thy-Oss faat Vi. Grand FORM APPROVED **UNITED STATES** Form 3160-5 Budget Bureau No. 1004-0135 DEPARTMENT OF THE INTERIOR (June 1990) BUREAU OF LAND MANAGEMENT Expires: March 31, 1993 5. Lease Designation and Serial No. NM0557371 SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allc ttee or Tribe Name Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT - " for such proposals 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE 8910138010 1. Type of Well 2520 X Oil Well 8. Well Name and No. Empire Abo Unit "K" 17 2. Name of Operator BP America Production Company 9. API Well No. 3. Address and Telephone No. <u>30-015-00703</u> P.O. Box 1089, Eunice, NM 88231 10. Field and Pool, or exploratory Area 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Empire Abo Unit Letter L. 1980' FSL & 660' FWL Section 1, T18S, R27E 11. County or Parish, State Eddy CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12. TYPE OF SUBMISSION TYPE OF ACTION Notice of Intent Abandonment Change of Plans Recompletion New Construction Subsequent Report Plugging Back Non-Rou ine Fracturing Casing Repair Water Shut-Off Final Abandonment Notice Altering Casing Conversion to Injection Workover Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) 13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally give subsurfacelocations and measured and true vertical depths for all markers and zone spertinent to this work.)* TD: 6137' CIBP: 5770' PERFS: 5472-5736' Unset pmp & TOH w/rods & pmp. NDWH. NUBOP. Unsetat TAC & POH w/tbg. TIH w/bit & scraper. Testing tbg to 5000# psi below slips. Tag @ 5780'. TOH. 06.03.02: RU & perf 2 JSPF 5472-79', 5492-94', 5498-5516', 5527-29', 5540-48', 5565-75', 5580-86', 5591-97', 5613-17', 5638-59', 5540-58', 5565-75', 5580-86', 5591-97', 5613-17', 5638-59', 5710-15', 5722-36', 230 holes. TIH w/treating pkr. Set @ 5383'. Drop SV. RU & pmp 20 bbls 7.5% HCL to pickle tbg. Swab back acid. Fish SV. Pmp 5,15006.04.02: gals 15% HCL w/350 ball sealers. TOH w/pkr. SION. TIH w/3-3/4" bailer & recover ball seals. TOH. TIH w/production tbg. Set @ 57/14" SN ECORD ACCEPTED FOR RECORD 06.05.02:

06.07.02: Load & test to 500# psi. Held OK. In 24 hrs pmp 0 BO, 1 BW, 2 MCF JUN 2 1 2002 LES BABYAK PETROLE UM ENGINEER 14. I hereby certify that the foregoing is frue and correct Title Sr. Administrative Assistant Date 06.18.02 (This space for Federal or State office use) Approved by, Title Date

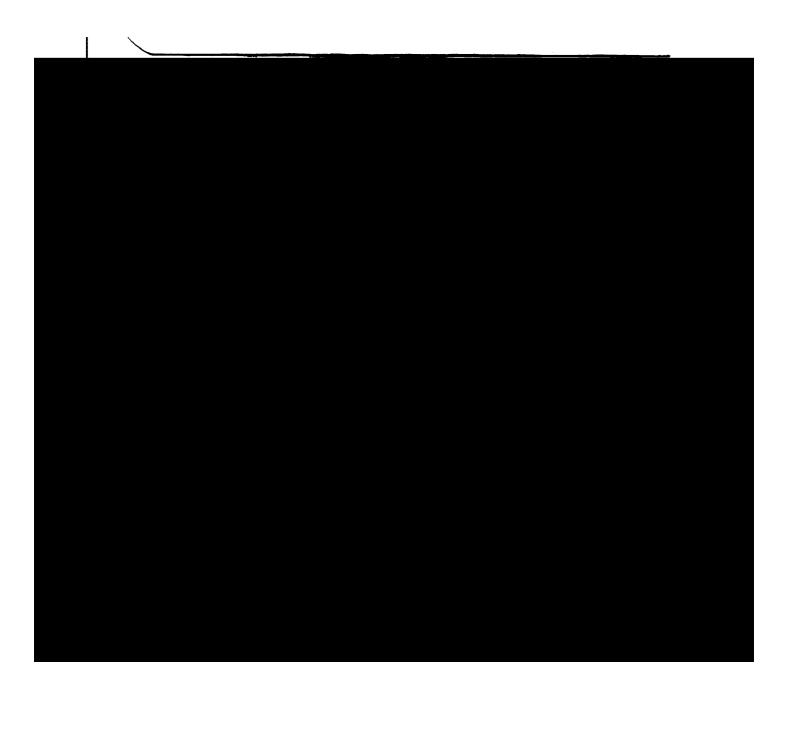
@ 5720'. NDBOP. Set TAC NUWH.

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, 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 statem or representations as to any matter within its jurisdiction.

466850-W 2811047-G 2811057-0 2812373-G

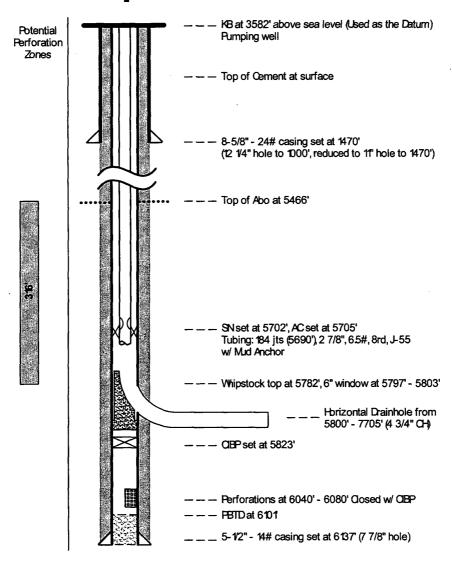
DD-105(H) Appr 1-18-95



	UNITED STATES EPARTMENT OF THE II UREAU OF LAND MANA	NTERIOR	OCE)-ARTI	ESIA	FORM OMB NO Expires: No 5. Lease Serial No.	D. 1004-	0135	1
BUNDRY Do not use the abandoned we	SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.					NMNM0557371 6. If Indian, Allottee o	r Tribe I	Vame	
SUBMIT IN TRI	PLICATE - Other instruc	tions on rev	erse side			7. If Unit or CA/Agree NMNM70945X	ment, N	ame and	/or No.
Type of Well ☐ Gas Well ☐ Oth	her					Well Name and No. EMPIRE ABO K 1	7		
2. Name of Operator Contact: KELLIE D. MURRISH 9. API Well No. BP AMERICA PRODUCTION CO E-Mail: murrikd@bp.com 30-015-00703-00-S1									
3a. Address 3b. Phone No. (include area code) Ph: 505.394.1649 Fx: 505.394.1624						10. Field and Pool, or Exploratory EMPIRE			
4. Location of Well (Footage, Sec., 7)		RECEI	AED	11. County or Parish,	and State	е	
Sec 1 T18S R27E NWSW 19	80FSL 660FWL			NÓV 1 9	2004	EDDY COUNTY	, NM		
			8	68-8A					
12. CHECK APP	ROPRIATE BOX(ES) TO	INDICATE				PORT, OR OTHE	R DAT	`A	
TYPE OF SUBMISSION			T	YPE OF A	CTION				
Notice of Intent	☐ Acidize	Deep Deep	en		Production	on (Start/Resume)	u W	ater Sh	ut-Off
	Alter Casing	□ Frac	ture Treat		Reclama	ion	\square^{W}	ell Inte	grity
☐ Subsequent Report	☐ Casing Repair	□ New	Construct	tion [⊃ Recompl	ete		ther	
☐ Final Abandonment Notice	☐ Change Plans	-	and Aban	_	_	rily Abandon			
	Convert to Injection	□ Plug	Back		Water Di	sposal			
13. Describe Proposed or Completed Op If the proposal is to deepen direction Attach the Bond under which the wo following completion of the involved testing has been completed. Final A determined that the site is ready for	ally or recomplete horizontally, ork will be performed or provide d operations. If the operation res bandonment Notices shall be file	give subsurface the Bond No. or sults in a multiple	locations an file with B e completion	nd measured BLM/BIA. R on or recomp	and true ver Required sub eletion in a n	tical depths of all pertir sequent reports shall be ew interval, a Form 316	ent mar filed wi 0-4 shal	kers and thin 30 c I be filed	zones. days donce
•	- '								
CIRC HOLE W/PKR FLUID	TEST TO 500# FOR 30 MINS. CUT CHART						¥		
ATTACHMENT: WELLBORE	SCHEMATIC EAU-N-90	1							
14. I hereby certify that the foregoing is	Electronic Submission #	35932 verified	by the BI	_M Well Inf	formation	System			
Cor	For BP AMERIC nmitted to AFMSS for proc					04AL0355SE)			
Name (Printed/Typed) KELLIE D). MURRISH		Title A	UTHORIZ	ZED REPI	RESENTATIVE			
Signature (Electronic	Submission)		_	9440/2004	-				·
	THIS SPACE FO	R FEDERA	L OF ST	TATE OF	FICE US	E			
Approved By /S/ J	oe G. Lara	P	Title	Petr	oleum	Engineer		10v 1	6 2004
Conditions of approval, if any, are attached certify that the applicant holds legal or eq which would entitle the applicant to cond	uitable title to those rights in the	not warrant or e subject lease	Office	CARL	LSBAD	FIELD OFF	CE		

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.

Empire Abo Unit 'K' 17





NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Director
Oil Conservation Division

Mark E. Fesmire, P.E.

Cabinet Secretary

29-Jul-05

BP AMERICA PRODUCTION COMPANY

PO Box 1089

Eunice NM 88231-0000

NOTICE OF VIOLATION - Inactive Well(s)

Dear Operator:

A review of our records and recent inspection(s) indicate that the subject well(s) has been shut-in for an extended period of time. Rule 201 of the Rules and Regulation of the Oil Conservation Division provides that a well may be shut-in no longer than sixty days after suspension of drilling operations, upon determining that ther well is no longer usable (e.g., a dry hole), or one year after last production. To comply with guidelines as established in the Rules and Regulations, corrective actions must be taken immediately and the well(s) brought into compliance.

The detail section below indicates preliminary findings and/or probable nature of the violation.

The following options are available:

- 1. Immediately restore the well(s) to production, injection or disposal as applicable.
- 2. Request 'Temporary Abandoned' status pursuant to Rule 203, which requires that you set a plug and conduct a mechanical integrity test.
- 3. Submit a proposal to 'Plug and Abandon' the well(s) pursuant to Rule 202, proceed with plugging procedures on a timely basis after the proposal has been evaluated, amended and/or approved.

In the event that a satisfactory response is not received to this letter of direction by the "Corrective Action Due By:" date shown above, further enforcement will occur. Such enforcement may include this office applying to the Division for an order summoning you to a hearing before a Division Examiner in Santa Fe to show cause why you should not be ordered to permanently plug and abandon this well. Such a hearing may result in imposition of CIVIL PENALTIES for your violation of OCD rules.

IDLE WELL INSPECTION DETAIL SECTION

EMPIRE ABO UNIT 017A L-1-18S-27E 30-015-00703-00-00 Inspection No. iCLB0521037721 Inspection Date: 7/29/2005 10:28:39 AM Corrective Action Due by: 11/1/2005 Type Inspection Inspector Violation? *Significant Non-Compliance? Routine/Periodic Chris Beadle Yes No Comments on Inspection: idle Well (Rule 201). No flowline attached, no production equipment on site. Last reported production was December 2002. Marker approximately 15 feet from wellhead for new well (AAO Federal 9).

Oil Conservation Division * 1301 W. Grand * Artesia, New Mexico 88210 Phone: 505-748-1283 * Fax: 505-748-9720 * http://www.emnrd.state.nm.us

Sincerely,

Artesia OCD District Office

Thank you for your prompt attention to this matter and your efforts in helping to protect our environment and the infra-

* Significant Non-Compliance events are reported directly to the U.S. Environmental Protection Agency, Region VI, Dallas, Texas.

The state of the s

Form 3160-5 (April 2004)

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137 Expires March 31, 2007

5. Lease Serial No.

SUNDRY NOTICES	AND REPORTS	ON WELLS		NMNM055737	
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.					ottee or Tribe Name
SUBMIT IN TRIPLICATE -	Other instructions	on reverse side	RECEIVED	7. If Unit or CA	VAgreement, Name and/or N
1. Type of Well X Oil Well Gas Well Other			OCT 1 1 2005	8. Well Name a	
2. Name of Operator		OC.	D-MITERIA	EMPIRE ABO	UNIT 17
BP America Production Company				9. API Well No	<i>.</i>
3a. Address		3b. Phone No. (include	•	30.015.007	
P.O. Box 1089 Eunice NM 88231 4. Location of Well (Footage, Sec., T., R., M., or Survey I	Daggeintion)	505.394.160	00		Pool, or Exploratory Area
				EMPIRE ABO	
NWSW, SEC 1, T18S, R27E, 1980' FSL	₹ 990, KMT			11. County or	Parish State
				EDDY	NM NM
12. CHECK APPROPRIATE	BOY(ES) TO INC	NCATE NATURE O	E NOTICE REP		
	BOX(E3) TO ME			011, 011 011	ILITORIA
TYPE OF SUBMISSION			TYPE OF ACTION		
X Notice of Intent	Acidize	Deepen	Production	(Start/Resume)	Water Shut-Off
45		= '	=		
Subsequent Report	Alter Casing	Fracture Treat	Reclamatio		Well Integrity
	Casing Repair	New Construction	= :		X Other IDLR WELL
Final Abandonment Notice	Change Plans	Plug and Abandon	n Temporaril	ly Abandon	
	Convert to Injection	on Dlug Back	Water Disp	oosal	*
determined that the final site is ready for final inspection. TD: 6137' PBD: 6101' VERTICAL WHIPSTOCK PERFS: 040-6080' BP America Production Company required and the Well issued by the New Mexical Action Due Date for this notice in the current scope of work include MIRUPU POH RODS & EQUIP REMOVE WHIPSTOCK & CIBP RIH W/PKR ASSY & SET BELOW HORIZOUTEST LOWER PERFORATED INTERVAL EVALUATE FINDINGS FROM LOWER ZONE	perfs: 5472-5 nuests a 60 day ico Oil Conserv s 11.01.05. } s testing the p	ation Commission	e Notice of Vi . The Correct 6050-6080 by:	,	. NMOCD
14. I hereby certify that the foregoing is true and correct		Title			
Name (Printed Typed) Kellie D. Murrish		1	duler		
Tuis (1) 47)		Date 10.07			
THIS	SPACE FOR FED	ERAL OR STATE C			
Approved by		Title		Dat	te
Conditions of approval, if any, are attached. Approval o certify that the applicant holds legal or equitable title to which would entitle the applicant to conduct operations the	those rights in the subj	arrant or Office ect lease			

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.

Form 3160-5

UNITED STATES DEPARTMENT OF THE INTERIOR. Oil Cons. DIV-Dist. 2

FORM APPROVED OMB NO. 1004-0137

(April 2004) Expires March 31, 2007 BUREAU OF LAND MANAGEMENSO1 W. Grand Avenue Lease Serial No. SUNDRY NOTICES AND REPORTS ON WELLS NIV 88210 Name Not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals. SUBMIT IN TRIPLICATE - Other instructions on reverse SIGECEIVED 7. If Unit or CA/Agreement, Name and/or No. 1. Type of Well OCT 1 8 2005 X Oil Well 8. Well Name and No. Gas Well Other EMPIRE ABO UNIT 17 2. Name of Operator יאי BP America Production Company 9. API Well No. 3a. Address 3b. Phone No. (include area code) 30.015.00703 P.O. Box 1089 Eunice NM 88231 505.394.1600 10. Field and Pool, or Exploratory Area 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) EMPIRE ABO NWSW, SEC 1, T18S, R27E, 1980' FSL & 660' FWL 11. County or Parish, State CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Production (Start/Resume) Water Shut-Off X Notice of Intent Acidize Well Integrity Alter Casing Fracture Treat Subsequent Report Casing Repair **New Construction** Other IDLE WELL Change Plans Plug and Abandon Temporarily Abandon Final Abandonment Notice Convert to Injection Plug Back Water Disposal Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final cite is reached for final increasing.) determined that the final site is ready for final inspection.) TD: 6137' PBD: 6101' VERTICAL PERFS: 5472-5736' CIBP: 5823' WHITPSTOCK PERFS: 040-6080' BP America Production Company requests a 60 day extention for the Notice of Violation - Idle Well issued by the New Mexico Oil Conservation Commission. The Corrective Action Due Date for this notice is 11.01.05. The current scope of work includes testing the previous perfs @ 6050-6080 by: MURUPU APPROVED FOR 2 MONTH PERIOD POH RODS & BOULP REMOVE WHIPSTOCK & CIBP ENDING 12/15/05 RIH W/PKR ASSY & SET BELOW HORIZONTAL SECTION TEST LOWER PERFORATED INTERVAL EVALUATE FINDINGS FROM LOWER ZONE

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)	Title	for record . Its				
Kellie D. Murrish	Scheduler					
Luis D. W. Junes	Date 10.07.05	Verelynia				
THIS SPACE FOR FEDERAL OR STATE OFFICE USE						
Approved by	Title FIRE CALCIAN	Date OT + 0 200E				

(ORIG. SGD.) ALEXIS C. SWOBODA Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. BETROLEUM ENGINEER | DCT 13 ZUUD KFO

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

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

DEC 102008

FORM APPROVED OMB NO. 1004-0137 Expires March 31, 2007

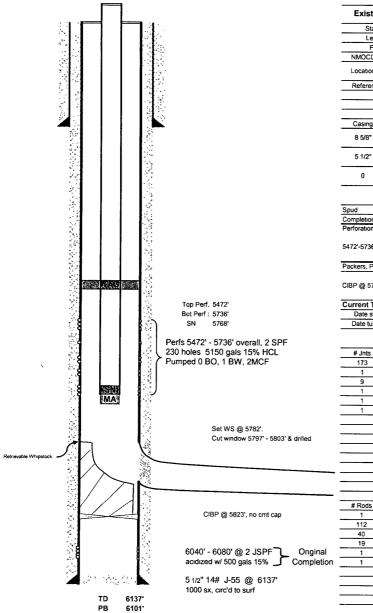
ARTESIA

5. Lease Serial No OCD-ARTES MANMO 557371 SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allottee or Tribe Name Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals 7. If Unit or CA/Agreement, Name and/or No. SUBMIT IN TRIPLICATE - Other instructions on reverse side NMNM70945X Type of Well 8. Well Name and No. X Oil Well Gas Well Other Empire Abo Unit Name of Operator BP America Production Company 9. API Well No. 3b. Phone No. (include area code) 30-015-00703 10. Field and Pool, or Exploratory Area P.O. Box 1089 Eunice NM 88231 575-394-1648 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Empire Abo Unit Letter L, 1980 FSL & 660 FWL 11. County or Parish, State Section 1, T18S, R27E CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION X Notice of Intent Water Shut-Off Acıdize Production (Start/Resume) Alter Casing Fracture Treat Reclamation Well Integrity Subsequent Report Casing Repair New Construction Recomplete Other Change Plans Plug and Abandon Temporarily Abandon **Einal Abandonment Notice** Convert to Injection Plug Back Water Disposal Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once 13. testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.) ** Remove Retrievable whipstock. Blace adequate determined that the final site is ready for final inspection.) ** Remove Retrievable whipsfock. place adequate cont to cap CIBP - Top of window. wor Top. (5823 - 5782)

1. MIRU PU. Check tubing, casing and surface pipe for pressure - bleed off into containment. Kill well as necessary. Monitor well and assure it's stable. POH LD/warehouse rods and pump. Monitor well and assure it is stable. ND WH, NU BOP. Release TAC and TOH. TIH with CIBP on 2 3/8" tubing and set at 5420'. Spot 250' cement plug on top of CIBP using 25 sx Class C neat. PU to 5150'. Load hole with mud-laden fluid (9 ppg, 1250# gel/100 bbl). TOH to 3400' (Glorieta top = 3290'). Spot 25 sack balanced cement plug from 3400' - 3150'. TOH. TIH with bull plug and perf nipple on tubing. Tag Glorieta plug; re-spot if necessary. TOH to 1550' (8 5/8" surface casing shoe = 1470'). Spot 35 sack balanced cement plug from 1550' -1200'. PU and WOC 2 hours. Tag plug, re-spot if necessary. TOH to 300' (Yates top = 172'). Fill 5 1/2" casing from 300' to surface with 30 sx Class C neat. TOH LD tubing. SEE ATTACHED FOR RD PU. 10. Install regulation dry-hole marker. Clean location and prepare location for Bin inspections ROVAL CEPTED FOR RECO I hereby certify that the foregoing is true and correct Name (Printed/Typed) Barry C. Price Area Operations Team Lead DEC 10 2008_{te} 11/18/08 THIS SPACE FOR FEDERAL CIR STATE OFFICE USE NIGOCLE-Motrict II Althae Sh Approved by Date Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

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 the section 1212, makes it a crime for any person knowingly and willfully to make to the section 1212, makes it a crime for any person knowingly and willfully to make to the section 1212, makes it a crime for any person knowingly and willfully to make to the section 1212, makes it a crime for any person knowingly and willfully to make to the section 1212, makes it a crime for any person knowingly and willfully to make to the section 1212, makes it a crime for any person knowingly and willfully to make to the section 1212, makes it a crime for any person knowingly and willfully to make to the section 1212, makes it a crime for any person knowingly and willfully to make to the section 1212, makes it a crime for any person knowingly and willfully to make to the section 1212 and 1212

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction



6101

Existing	WB Dia	Empire Abo Unit K-17					
Status	Prod	ucing	Operator	BP An	nenca		
Lease	Empire /	Abo Unit Zone					
Field			API	30-015-00703			
NMOCD	Empire Abi	Unit K-17	NMOCD				
Location 1980' FSL & 660 FWL, S-01 T-18S R-27E							
Reference							
KB		TVD	6137'	PBTD	6101'		
GL	3,569	MTD		Last CIBP	5770'		
Casing	Weight/Grade	Depth	Cmt Sx	Hole	TOC		
8 5/8"	24#/J-55	1468	750 sx	11"	surf		
0 3/0	24#/3-00	1400	750 \$X	''	Suii		
5 1/2"	15.5#/J-55	6137	1000 sx	7 7/8"	surf		
0	0	0	0	0	0		
Spud	3/26/1959		Top Perf	5472'			
Completion Perforation His	4/20/1959)' - 6080')	Top Perf Bot Perf	5472' 5736'			
`	4/20/1959 story sehind cibp.6040 s, and Cement)' - 6080')					
Completion Perforation His 5472'-5736' (b Packers, Plug	4/20/1959 story sehind cibp.6040 s, and Cement		Bot Perf	5736'	ons		
Completion Perforation His 5472'-5736' (b Packers, Plug CIBP @ 5770' Current Tub	4/20/1959 story sehind cibp.6040 s, and Cement	oxes use dro	Bot Perf	5736'	ons		
Completion Perforation His 5472'-5736' (b Packers, Plug: CIBP @ 5770' Current Tub Date sketce	4/20/1959 story sehind cibp.6040 s, and Cement , 5823'		Bot Perf	5736'	ons		
Completion Perforation His 5472'-5736' (b Packers, Plugi CIBP @ 5770' Current Tub Date skett Date tubula	4/20/1959 story whind cibp.6040 s, and Cement . 5823' culars: Blue behichecked	oxes use dro 2/11/08	Bot Perf DP down boxes by by	5736'	Top of Dep		
Completion Perforation His 5472'-5736' (b Packers, Plugi CIBP @ 5770' Current Tub Date skett Date tubula	4/20/1959 story ehind cibp.6040 s, and Cement , 5823' rulars: Blue b ch checked ars checked	oxes use dro 2/11/08 Rod Asser	Bot Perf DP down boxes by by	5736'	Top of Dep		
Completion Perforation His 5472'-5736' (b Packers, Plug CIBP @ 5770' Current Tub Date sketo Date tubula	4/20/1959 story ehind cibp.6040 s, and Cement , 5823' sulars: Blue b th checked ars checked Jbing and I	oxes use dr 2/11/08 Rod Asser	Bot Perf Dop down boxes by by mbly	5736' for descript	Top of Dep		
Completion Perforation His 5472'-5736' (b Packers, Plug: CIBP @ 5770' Current Tub Date sketo Date tubuk # Jnts	4/20/1959 story sehind cibp.604t s, and Cement , 5823' sulars: Blue b ch checked ars checked Jbing and Description of 2,3/67/47#;3-5	oxes use dre 2/11/08 Rod Asser IBG Assembly 5 EUE,8 Rod 3	pop down boxes by by mbly RKB	5736' for description length, ft 12 00	Top of Depi from KB, f		
Completion Perforation His 5472'-5736' (b Packers, Plugi CIBP @ 5770' Current Tub Date skett Date tubula Tt # Jnts 173	4/20/1959 story ehind cibp.6040 s, and Cement , 5823' sulars: Blue b ch checked ars checked Jbing and Description of 2,3/67/4/7#-3-5 2,3/67/4/7#-3-5 2,3/67/4/7#-3-5	oxes use dre 2/11/08 Rod Asser IBG Assembly DTAC 8 Rnd 3 DTAC 5 EUE 8 Rnd 3	pp down boxes by by mbly RKB	5736' for descripti length, ft 12 00 5448 98	Top of Dept from KB, f		
Completion Perforation His 5472'-5736' (b Packers, Plug CIBP @ 5770' Current Tub Date skett Date tubuk # Jnts 173 1	4/20/1959 story sehind cibp.6040 s, and Cement , 5823' sulars: Blue b ch checked ars checked Jbing and I Description of 2,3/67/4/7#/J-5 2,3/67/4/7#/J-5 2,3/67/4/7#/J-5 2,3/67/4/7#/J-5 2,3/67/4/7#/J-5 2,3/67/4/7#/J-5 2,3/67/4/7#/J-5 2,3/67/4/7#/J-5 2,3/67/4/7#/J-5 2,3/67/4/7#/J-5 2,3/67/4/7#/J-5	oxes use dro 2/11/08 Rod Asser IBG Assembly 5 EUE, 8 Rnd II DaTAG 5 EUE 8 Rnd II 5 EUE 8 Rnd II	pp down boxes by by nbly RKB	5736' for descript: length, ft 12 00 5448 98 2 75	Top of Depi from KB, f 12 00 5460 98		
Completion Perforation His 5472-5736' (b Packers, Plugi CIBP @ 5770' Current Tub Date skett Date tubuk # Jnts 173 1 9 1 1	4/20/1959 story ehind cibp.6046 s, and Cement .5823' sulars: Blue b th checked ars checked Jbing and I Description of 2.3/61/27#3-5 2.3/61/X 5.53/0 2.3/62/47#3-5 2.3/61/47#3-5 2.3/61/47#3-5 2.3/61/47#3-5 2.3/61/47#3-5	oxes use dri 2/11/08 Rod Asser 18G Assembly 5 EUE, 8 Rnd .1 D,TAC 5 EUE 8 Rnd .1 5 EUE 8 Rnd .1	pp down boxes by by nbly RKB bg	5736' Iength, ft 12 00 5448 98 2 75 272 65 32 46 1 10	Top of Depi from KB, f 12 00 5460 98 5463 73 5736 38 5768.84		
Completion Perforation Hit 5472'-5736' (b Fackers, Plugi CIBP @ 5770' Date sket Date sket 173 1 9 1	4/20/1959 story sehind cibp.6040 s, and Cement . 5823' sulars: Blue behichecked ars checked ubing and I	OXES USE dro 2/11/08 ROD ASSER (FBG ASSEMBLY 5 EUE 8 Rod, 7 5 EUE 8 Rod, 7 5 EUE 8 Rod, 7 5 EUE 8 Rod, 8 5 EUE 8 Rod, 8 5 EUE 8 Rod, 8 6 EUE 8 EUE 8 Rod, 8 6 EUE 8 EUE 8 EUE 8 6 EUE 8 EUE 8 EUE 8 6 EUE 8 EUE 8 EUE 8 6 EUE 8 EUE 8 EUE 8 6 EUE 8 EUE 8 EUE 8 6 EU	op down boxes by by mbly RKB	5736' For description of the second of the	Top of Depi from KB, f 12 00 5460 98 5463 73 5736 38 5768.84 5769 94		
Completion Perforation His 5472-5736' (b Packers, Plugi CIBP @ 5770' Current Tub Date skett Date tubuk # Jnts 173 1 9 1 1	4/20/1959 story ehind cibp.6040 s, and Cement , 5823' sulars: Blue b th checked ars checked Jbing and I Description of 2,3/87/47/47-5-5 2,3/87/47/47/5-5 2,3/87/47/47/5-5 2,3/87/47/47/5-5 2,3/87/47/47/5-5 2,3/87/47/47/5-5	OXES USE driver 2/11/08 ROD ASSER FBG ASSEMBLY 5 EUE 8 Rnd. 1 5 EUE 8 Rnd. 1 5 EUE 8 Rnd. 1 5 EUE 6 Rnd. 1 5 EUE 6 Rnd. 1	pp down boxes by by mbly RKB bg %%	5736' Iength, ft 12 00 5448 98 2 75 272 65 32 46 1 10	Top of Depi from KB, f 12 00 5460 98 5463 73 5736 38 5768.84 5769 94 5795 62		
Completion Perforation His 5472-5736' (b Packers, Plugi CIBP @ 5770' Current Tub Date skett Date tubuk # Jnts 173 1 9 1 1	4/20/1959 story ehind cibp.6046 s, and Cement .5823' sulars: Blue b checked ars checked ubing and I Descript/#ij-5 2.3/6" × 5.50 2.3/8" 4/#ij-5 2.3/8" API,SN 3.1/2" (9.5%)	oxes use dri 2/11/08 Rod Asser FBG Assembly 5 EUE, 8 Rnd. 1 D. TAC \$1 5 EUE 8 Rnd. 1 5 EUE 8 Rnd II 5 EUE 8 Rnd II	pp down boxes by by mbly RKB bg	5736' Iength, ft 12 00 5448 98 2 75 272 65 32 46 1 10	Top of Depi from KB, f 12 00 5460 98 5463 73 5736 38 5768.84 5769 94 5795 62		
Completion Perforation His 5472-5736' (b Packers, Plugi CIBP @ 5770' Current Tub Date skett Date tubuk # Jnts 173 1 9 1 1	4/20/1959 story sehind cibp.6040 s, and Cement .5823' sulars: Blue beh checked ars checked Jbing and I Description of 2,3/67,4774,1-5 2,3/67,474,1-5 2,3/67,474,1-	oxes use dro 2/11/08 Rod Asser IBG Assembly 5 EUE 8 Rnd.1 5 EUE 8 Rnd.1 5 EUE 8 Rnd.1 5 EUE 8 Rnd.1	op down boxes by by mbly RKB bg C Tog	5736' Iength, ft 12 00 5448 98 2 75 272 65 32 46 1 10	Top of Depi from KB, f 12 00 5460 98 5463 73 5736 38 5768.84 5769 94 5795 62 5795 62 5795.62		
Completion Perforation His 5472-5736' (b Packers, Plugi CIBP @ 5770' Current Tub Date skett Date tubuk # Jnts 173 1 9 1 1	4/20/1959 story sehind cibp.6040 s, and Cement , 5823' sulars: Blue beh checked ars checked Jbing and I Description of 2,3/87/4/74/3-5 2,3/87/4/74/3-5 2,3/87/4/74/3-5 2,3/87/4/74/3-5 2,3/87/4/74/3-5 2,3/87/4/74/3-5 2,3/87/4/74/3-5	OXES USE dro 2/11/08 ROD ASSET FIG ASSEMBLY 5 EUE, 8 Rnd. 1 0, TAC. 5 EUE 8 Rnd. 1 5 EUE 8 Rnd. 1 5 EUE 6 Rnd. 1 5 Slotted, MA' v	op down boxes by by mbly RKB bg	5736' Iength, ft 12 00 5448 98 2 75 272 65 32 46 1 10	Top of Depi from KB, f 12 00 5460 98 5463 73 5736 38 5768.84 5769 94 5795 62 5795 62 5795 62		
Completion Perforation His 5472-5736' (b Packers, Plugi CIBP @ 5770' Current Tub Date skett Date tubuk # Jnts 173 1 9 1 1	4/20/1959 story ehind cibp.6040 s, and Cement .5823' sulars: Blue b checked ars checked Jbing and I Description of 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,45 2,3/67,47,47,47 2,3/67,47,47 2,3/67,47,47 2,3/67,47,47 2,3/67,47 2,3/67,47 2,3/67,47 2,3/67,47 2,3/67,47 2,3/67,47 2,3/67,47 2,3/67,47 2,3/67,47 2,3/67 2,3/	oxes use dri 2/11/08 Rod Asser IBG Assembly 5 EUE 8 Roid T D,TAC 5 EUE 8 Roid T 5 EUE 8 Roid T 5 EUE 8 Roid T	pp down boxes by by mbly RKB bg	5736' Iength, ft 12 00 5448 98 2 75 272 65 32 46 1 10	Top of Depi from KB, f 12 00 5460 98 5463 73 5736 38 5768.84 5769 94 5795 62 5795 62 5795.62 5795.62		
Completion Perforation His 5472-5736' (b Packers, Plugi CIBP @ 5770' Current Tub Date skett Date tubuk # Jnts 173 1 9 1 1	4/20/1959 story sehind cibp.6046 s, and Cement .5823' sulars: Blue b th checked ars checked Jbing and I Description of 2.3/8' X 5.5 C 2.3/8' X 7.74' J-5 2.3/8' 4.74' J-5 2.3/8' 4.74' J-5 2.3/8' 4.74' J-5 2.3/8' 4.74' J-5	oxes use dre 2/11/08 Rod Asser IEG Assembly DITAC 5 EUE 8 Rnd.1 5 EUE 8 Rnd.1 5 EUE 8 Rnd.1 5 EUE 8 Rnd.1	op down boxes by by mbly RKB bg	5736' Iength, ft 12 00 5448 98 2 75 272 65 32 46 1 10	Top of Depl from KB, fi 12 00 5460 98 5463 73 5736 38 5768.84 5769 94 5795 62 5795 62 5795 62 5795 62		

Current Rod Design

Description of Rod Assembly RKB

11/4* Des'x 22* RR, w/11/22/X16* RR liner

1:00* FG, Rods with Couplings

1:5/8* C_Sinker Bars

1:5/8* C_Sinker Bars

Pump with gas anchor;

2 0 x 1 5 x 26' w/ gas stinger anchor 1"x10'

112

40 19

12 00

12.00

34.00

4234 00

5234.00

5709 00

5734.00 5770 00

5770 00

5770 00

5770 00 5770 00

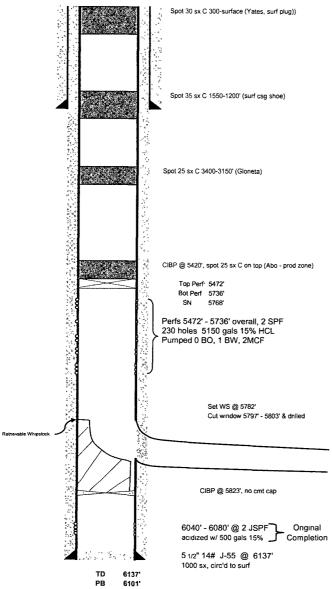
5770 00 5770 00

22 00 4200 00

1000 00

475 00

36.00



Lease						
Lease Empire Abo Unit Zone API 30- NMOCD Empire Abo Unit K-17 NMOCD Location 1980' FSL & 660 FWL, S-01 T-18S R-27E Reference KB 3,582 TVD 6137' PBTD GL 3,569 MTD Last CIBP Casing Weight/Grade Depth Cmt Sx Hole 8 5/8" 24#/J-55 1468 750 sx 11" 5 1/2" 15.5#/J-55 6137 1000 sx 7 7/8" 0	015-00703 6101' 5770' TOC surf of the surf of the s					
NMOCD	6101' 5770' TOC surf o					
Location	5770' TOC surf o					
Reference KB 3,582	5770' TOC surf o					
KB 3,582 TVD 6137' PBTD GL 3,569 MTD Last CIBP	5770' TOC surf o					
Casing Weight/Grade Depth Cmt Sx Hole	5770' TOC surf o					
Casing Weight/Grade Depth Cmt Sx Hole 8 5/8" 24#/J-55 1468 750 sx 11" 5 1/2" 15.5#/J-55 6137 1000 sx 77/8" 0 0 0 0 0 Spud 3/26/1959 Top Perf 5472' Completion 4/20/1959 Bot Perf 5736' Perforation History 5472'-5736' (behind cibp.6040' - 6080') Packers, Plugs, and Cement. Whipstock 5782-5812', CIBP @ 5823' Current Tubulars: Blue boxes use drop down boxes for descriptions the sketch checked 2/11/08 by Date tubulars: Blue boxes use drop down boxes for descriptions checked by Tubing and Rod Assembly length ft # Jnts Description of TBG Assembly RiKB 1 23/6",4"#J-355.EUE'8 Rid,Tbg 5448 1 23/6",4"#J-355.EUE'8 Rid,Tbg 48 1 23/6",4"#J-355.EUE'8 Rid,Tbg 272 1 23/6",4"#J-355.EUE'8 Rid,Tbg 32 1 23/6",4"#J-355.EUE'8 Rid,Tbg 32 1 23/6",4"#J-355.EUE'8 Rid,Tbg 32 <t< td=""><td>TOC surf</td></t<>	TOC surf					
8 5/8" 24#/J-55 1468 750 sx 11" 5 1/2" 15.5#/J-55 6137 1000 sx 7 7/8" 0 0 0 0 0 0 0 Spud 3/26/1959 Top Perf 5472' Completion 4/20/1959 Bot Perf 5736' Perforation History 5472'-5736' (behind cibp.6040' - 6080') Packers, Plugs, and Cement. Whipstock 5782-5812', CIBP @ 5823' Current Tubulars: Blue boxes use drop down boxes for desc Date sketch checked 2/11/08 by: Date tubulars checked 2/11/08 by: Tubing and Rod Assembly RKB 12 173 2 3/8", 3/11", 3-55 EUE'8 Rnd.Tbg. (1997) 5448 1 2 3/8", 3/11", 3-55 EUE'8 Rnd.Tbg. (1997) 5448 1 2 3/8", 3/11", 3-55 EUE'8 Rnd.Tbg. (1997) 32 1 2 3/8", 4/11", 3-55 EUE'8 Rnd.Tbg. (1997) 32 1 2 3/8", 4/11", 3-55 EUE'8 Rnd.Tbg. (1997) 32 1 2 3/8", 4/11", 3-55 EUE'8 Rnd.Tbg. (1997) 32 1 2 3/8", 4/11", 3-55 EUE'8 Rnd.Tbg. (1997) 32 1 2 3/8", 4/11", 3-55 EUE'8 Rnd.Tbg. (1997) 32	surf 0					
8 5/8" 24#/J-55 1468 750 sx 11" 5 1/2" 15.5#/J-55 6137 1000 sx 7 7/8" 0 0 0 0 0 0 0 Spud 3/26/1959 Top Perf 5472' Completion 4/20/1959 Bot Perf 5736' Perforation History 5472'-5736' (behind cibp.6040' - 6080') Packers, Plugs, and Cement. Whipstock 5782-5812', CIBP @ 5823' Current Tubulars: Blue boxes use drop down boxes for desc Date sketch checked 2/11/08 by: Date tubulars checked 2/11/08 by: Tubing and Rod Assembly RKB 12 173 2 3/8", 3/11", 3-55 EUE'8 Rnd.Tbg. (1997) 5448 1 2 3/8", 3/11", 3-55 EUE'8 Rnd.Tbg. (1997) 5448 1 2 3/8", 3/11", 3-55 EUE'8 Rnd.Tbg. (1997) 32 1 2 3/8", 4/11", 3-55 EUE'8 Rnd.Tbg. (1997) 32 1 2 3/8", 4/11", 3-55 EUE'8 Rnd.Tbg. (1997) 32 1 2 3/8", 4/11", 3-55 EUE'8 Rnd.Tbg. (1997) 32 1 2 3/8", 4/11", 3-55 EUE'8 Rnd.Tbg. (1997) 32 1 2 3/8", 4/11", 3-55 EUE'8 Rnd.Tbg. (1997) 32	surf 0					
Spud 3/26/1959 Top Perf 5472'	surf					
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 criptions					
Spud 3/26/1959 Top Perf 5472'	riptions					
Bot Perf 5736'						
Bot Perf 5736'						
Bot Perf 5736'						
Perforation History 5472-5736' (behind cibp.6040' - 6080') Packers, Plugs, and Cernent. Whipstock 5782-6812', CIBP @ 5823' Current Tubulars: Blue boxes use drop down boxes for desc Date sketch checked 2/11/08 by: Date tubulars checked by Tubing and Rod Assembly length, ft 173 2 395-4741, J-55 EUE'8 Rid-Tbg (1994) 5448 1 2 395-4741, J-55 EUE'8 Rid-Tbg (1994) 272 1 2 395-4741, J-55 EUE'8 Rid-Tbg (1994) 32 1 2 395-4741, J-55 EUE'8 Rid-Tbg (1994) 32 1 2 395-4741, J-55 EUE'8 Rid-Tbg (1994) 32 1 2 395-4741, J-55 EUE'8 Rid-Tbg (1994) 32						
# Jnts Description of TBG Assembly RKB 12 2.3/6*,47.7#.J-55 EUE'8 Rnd,Tbg 7.3/2 7.2 7.2 7.2 7.2 7.3/2						
Date sketch checked 2/11/08 by Date tubulars checked by Tubing and Rod Assembly length, ft # Jints Description of TBG Assembly RKB 173 2 3/61,47#J-55 EUE'8 Rfd.Tbg. (金属) 5448 1 2 3/61,47#J-55 EUE'8 Rfd.Tbg. (金属) 272 9 2 3/61,47#J-55 EUE'8 Rfd.Tbg. (金属) 272 1 2 3/61,47#J-55 EUE'8 Rfd.Tbg. (金属) 32 1 2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log) 32 1 2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log) 32 1 2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log) 32 1 2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log) 32 1 2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log) 32 1 2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log) 32 1 2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log) 32 1 2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log) 32 1 2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log) 33 1 2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log) 33 1 2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log) 33 1 2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log) 33 1 2 3/61,47#J-55 EUE'8 Rfd.Tbg. (Called Log) 34						
Date tubulars checked by	T(F					
# Jnts Description of TBG Assembly RKB 12 173 2 3/8°, 4.7#.J-55.EUE/8 Rnd.Tbg	T (C					
173 2 3/8; 4.7#, J-55 EUE B Rid (Tog) (金融) 5448 1 2/3/8; X.5.5; OD (TAC (金融) 5/8) (金融) 2 9 2/3/8; 4.7#, J-55 EUE B Rid (Tog) (金融) 2 1 2/3/8; 4.7#, J-55 EUE B Rid (Tog) (金融) 32 1 2/3/8; API, SN, 金融 5/8; 200 (3.7#) 2	Top of Dept from KB, ft					
1 2.386"X 5.5"、OD.TAC 除血上腺素。 22 9 2.386" 4 7# J-55 EUE 8 Rnd,Tbg 一致人员员 1 2.386" 4 7# J-55 EUE'8 Rnd (Tbg) 22 1 2.386" 4 Pl.SN、定语、系统、定语、定语、定语、定语、定语、定语、定语、定语、定语、定语、定语、定语、定语、	00					
9 2.3/8,4-7#, 3-55,EUE,8-Rnd,Tbg 272 1 2.3/8,4-7#,3-55,EUE'8-Rnd (PC,Tbg 32 1 2.3/8,4-PL,SN, 33 1 1 2.3/8,4-PL,SN, 34						
1 2,3/8/4/,7# J-55 EUE'8 Rnd IPC (Tbg增多数 32 1 2,3/8/API,SN, 223 348/4/2/37 1 1	75 5460 98					
1 2 3/8 API SN 1						
1 3.1/2":9.5# J-55 Slotted MA w/Bull Plug 25						
	5795 62					
	5795 62 5795 62					
1200年120日 120日 120日 120日 120日 120日 120日 120日	5795.62					
	5795.62					
	5795.62					
5795.62						
Current Rod Design						
	00					
1 1/4*Dia X 22*BR W/15/Z*X 16* RR Inin 深流 22 112 1:00** FG. Rods with Couplings 深深 22 4200						
112 1.00" FG Rods with Couplings 4200 40 7/8" Dia "C" Rods 1000						
19 15/8", C. Sinker, Bars 475						
1 1,5/8° C' Sinker Bars 25						
1 Prump, Marigas and role						
(3) これによったは、実施でありため、ボール、風からができないを発送した。本体でありたがあり、	00 5734.00					
Proceedings to recognize the property of	00 5734.00 5770.00					
TO A STATE OF THE SECOND S	00 5734.00 5770.00 5770.00					
	00 5734.00 5770 00 5770 00 5770 00					
THE SAME SECTION ASSOCIATION AND ASSOCIATION AND ASSOCIATION AND ASSOCIATION A	00 5734.00 5770.00 5770.00					

 $2.0 \times 1.5 \times 26'$ w/ gas stinger anchor 1"x10"

5770.00

BUREAU OF LAND MANAGEMENT Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220 575-234-5972

Permanent Abandonment of Federal Wells Conditions of Approval

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within <u>ninety (90)</u> days from the approval date of this Notice of Intent to Abandon.

If you are unable to plug the well by the 90th day provide this office, prior to the 90th day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged. Failure to do so will result in enforcement action.

- 2. <u>Notification:</u> Contact the appropriate BLM office at least 24 hours prior to the commencing of any plugging operations. For wells in Chaves and Roosevelt County, call 575-627-0272; Eddy County, call 575-361-2822; Lea County, call 575-393-3612.
- 3. <u>Blowout Preventers</u>: A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.
- 4. <u>Mud Requirement:</u> Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of water. Minimum nine (9) pounds per gallon.
- 5. <u>Cement Requirement</u>: Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. In lieu of a cement plug in a cased hole, a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement. If a bailer is used to cap this plug, 35 feet of cement shall be sufficient.

Unless otherwise specified in the approved procedure, the cement plug shall consist of either Neat Class "C", for up to 7,500 feet of depth or Neat Class "H", for deeper than 7,500 feet plugs.

- 6. <u>Dry Hole Marker</u>: All casing shall be cut-off at the base of the cellar or 3 feet below final restored ground level (whichever is deeper). The well bore shall then be capped with a 4-inch pipe, 10-feet in length, 4 feet above ground and embedded in cement. The following information shall be permanently inscribed on the dry hole marker: well name and number, name of the operator, lease serial number, surveyed location (quarter-quarter section, section, township and range or other authorized survey designation acceptable to the authorized officer such as metes and bounds).
- 7. <u>Subsequent Plugging Reporting:</u> Within 30 days after plugging work is completed, file one original and five copies of the Subsequent Report of Abandonment, Form 3160-5 to BLM. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. <u>Show date well was plugged.</u>
- 8. <u>Trash:</u> All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

Following the submission and approval of the Subsequent Report of Abandonment, surface restoration conditions of approval will be developed and furnished to you.

Form 3160-5 (April 2004)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FER 18 2009

FORM APPROVED OMB NO. 1004-0137 Expires March 31, 2007

5	Lease Serial No.	
NM	NM0557371	
	TCT 1: All as	- T N

SUBMIT IN TRIPLICATE - Other instructions on reverse side	SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.			NMNM0557371 6 If Indian, Allottee or Tribe Name				
Subsection Ones well Other				7. If Unit or CA/Agreement, Name and/or No NMNM70945X				
30. 015-00703 30. 01	X Oil Well Gas Well Other 2. Name of Operator				Empire Abo Unit 17			
12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Notice of Intent	Address P.O. Box 1089 Eunice NM 88231 Location of Well (Footage, Sec., T., R., M., or Survey II) Unit Letter L, 1980 FSL & 660 FWL	•	rea code)	30-015-00703 10. Field and Pool, or Exploratory Area Empire Abo 11. County or Parish, State				
Notice of Intent	12. CHECK APPROPRIATE	BOX(ES) TO IND	ICATE NATURE OF	NOTICE, REP				
Alter Chang Fracture Treat Reclamation Well Integrity Other Remove CIBP	TYPE OF SUBMISSION		TY	PE OF ACTION	N			
Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones attach the Bond which which the work will be performed or provide the Bond No on file with BLMPIAR Required subsequent reports shall be filed or the stage of the Bond No on file with BLMPIAR Required subsequent reports shall be filed or testing has been completed. Final Abandomient Notices shall be filed or only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.) SUBSEQUENT REPORT FOR THIS WORK WAS INADVERTENTLY OVERLOOKED AND BP FAILED TO FILE OR NOTIFY OF RTP. REPORT NOW BEING SUBMITTED TO UPDATE BLM RECORDS. 1/20/06: MIRUPU. Unseat pump lay down 66·1' rods, 69 7/8' rods, 82 3/4' rods, 10 7/8' rods w/ g & pump. Prep to NU BOP. 1/23/06: NDWH NU BOP release TAC laydown prod tbp. 1/24/06: TIH w/ 4 3/4' bit picking up 66 it 2 7/8 DP & 2 7/8 tbp workstring to 5100'. 1/25/06: RU foam air unit break circ w/ air TIP tag CIBP @ 5768' by our SLM. RU power swivel start drlg on CIBP. Plug turned loose in 2 hr. Push to 5779' circ clean w/ foam air blow well down. 1/26/06: TIH wsh CIBP to end of horizontal @ 7700' TOH laydown 2 7/8". 1/27/06: Pick up hook, bumper sub. jars, & 4 3 1/2" DC - TIH w/tbg fish for Whipstock from 5736 5862' no bite. TOH w/ hook prep to run box tap. 1/30/06: TIH w/ box tap, BS, Jars, 4 3 1/2" DC & tbg tag whipstock @ 5806' work over fish try to work whipstock loose kept pulling off. TOH WOO. 1/31/06: Rid down foam air unit & power swivel - laydown DC - TIH w/ work string & laydown same - chg out tbg & BOP rams. 2/1/06: Pickup 2 3/8 prod tbg test in hole 5000 psi below slips. 2/2/06: NB BOP NUMH. Pickup pump & new rod design space well out left 7' of polish rod out l		Alter Casing	Fracture Treat	Reclamation	on Well Integrity			
If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths which the work will be performed or provide the Bond No on file with BLMRAR Required subsequent reports shall be filed within 30 days following completion or the mixed operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed vitinal 30 days following completion or the mixed only after all requirements, middleng reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.) SUBSEQUENT REPORT FOR THIS WORK WAS INADVERTENTLY OVERLOOKED AND BP FAILED TO FILE OR NOTIFY OF RTP. REPORT NOW BEING SUBMITTED TO UPDATE BLM RECORDS. 1/20/06: MIRUPU. Unseat pump lay down 66-1' rods, 69 7/8' rods, 82 3/4' rods, 10 7/8' rods w/ g & pump. Prep to NU BOP. 1/23/06: NDWH NU BOP release TAC laydown prod tbg. 1/24/06: TIH w/ 4 3/4' bit picking up 66 jt 2 7/8 DP & 2 7/8 tbg workstring to 5100'. 1/25/06: RU foam air unit break circ w/ air TIP tag CIBP @ 5768' by our SLM. RU power swivel start drlg on CIBP. Plug turned loose in 2 hr. Push to 5779' circ clean w/ foam air blow well down. 1/26/06: TIH push CIBP to end of horizontal @ 7700' TOH laydown 2 7/8". 1/27/06: plook, bumper sub, jars, 4 3 1/2" DC • THH w/ bg fish for Whipstock from 5736 5862' no bite. TOH w/ hook prep to run box tap. 1/30/06: TIH w/ box tap, BS, Jars, 4 3 1/2" DC & tbg tag whipstock @ 5806' work over fish try to work whipstock loose kept pulling off. TOH w/00. 1/31/06: Rig down foam air unit & power swivel • laydown DC • TIH w/ work string & laydown same • chg out tbg & BOP rams. 2/1/06: Pickup 2 3/8 prod tbg test in hole 5000 psi below slips. 2/2/06: ND BOP NUMH. Pickup pump & new rod design space well out left 7' of polish rod out load & test to 500 psi ok • no pump action • unseat pump flush 10 bbl water • load test to 500 psi ok-still no pump action. 2/3/06: TOH w/ rods & pump. Run swab to ck	Final Abandonment Notice				-			
Name (Printed Typed) Parry C. Price Date 2/2/09 THIS SPACE FOR FEDERAL OR STATE OFFICE USE Approved by Title FI Bate 1 6 2009 Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon	If the proposal is to deepen directionally or recomp Attach the Bond under which the work will be per following completion of the involved operations. I testing has been completed. Final Abandonment Metermined that the final site is ready for final inspect SUBSEQUENT REPORT FOR THIS WORK WEPORT NOW BEING SUBMITTED TO UPD 7/8' rods, 82 3/4' rods, 10 7/8' laydown prod tbg. 1/24/06: TIH w/ 1/25/06: RU foam air unit break cdrlg on CIBP. Plug turned loose if TIH push CIBP to end of horizonta & 4 3 1/2" DC - TIH w/tbg fish fo 1/30/06: TIH w/ box tap, BS, Jars whipstock loose kept pulling off. TIH w/ work string & laydown same 5000 psi below slips. 2/2/06: ND rod out load & test to 500 psi-ok psi-ok-still no pump action. 2/3/Pump 30 bbl while adding 2 jt to 2/8/06: Run pump & rods L&T to 50	olete horizontally, give sifermed or provide the Efformed or provide the Efformed or provide the Efformed or provide the Efformed or provide the Efformed or provide the Efformed or Provide the Efformed of t	ibsurface locations and measond No on file with BLM a multiple completion or ry after all requirements, in 1/20/06: MIRUPU. D. Prep to NU BOP. Ting up 66 jt 2 7/2 ag CIBP @ 5768' b 5779' circ clean by 1/20/06: MIRUPU. D. Strong up 66 jt 2 7/2 ag CIBP @ 5768' b 5779' circ clean by 1/2 ag Whipstock by 1/2	sured and true ve ecompletion in a cluding reclamation of the cluding recla	rtical depths of all pertiment markers and zones subsequent reports shall be filed within 30 days new interval, a Form 3160-4 shall be filed once on, have been completed, and the operator has FILE OR NOTIFY OF RTP. o lay down 66-1' rods, 69 NDWH NU BOP release TAC 8 tbg workstring to 5100'. RU power swivel start blow well down. 1/26/06: up hook, bumper sub, jars, nook prep to run box tap. To k over fish try to work power swivel - laydown DC - 3/8 prod tbg test in hole well out left 7' of polish water - load test to 500 level dry. WOO. 2/6/06: Swab test still no fluid.			
Approved by Title Tit	Name (Printed/Typed)			ponations T	complex and the second			
THIS SPACE FOR FEDERAL OR STATE OFFICE USE Approved by Title FI Bate 1 6 2009 Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon	Anch Ch							
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon	THIS	SPACE FOR FED		FICE USE				
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon					FI Bate 1 6 2009			
E / MINV ALL DE L'ONE L'AND CONTRACTOR DE L'AN	certify that the applicant holds legal or equitable title to which would entitle the applicant to conduct operations the	those rights in the subjecteon	ect lease		4 Como			

FOR RECORDS ONLY



Form 3160-5 (February 2005)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCD-ARI	TESIA
---------	-------

FORM APPROVED OMB No. 1004-0137

	U
APPROVED	
1004-0137	

OMB No. 1004-0137 Expires: March 31, 2007 Expires: March 31, 2007

DONERO OF ENTROPHENTI				NMNM0557371					
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.				n	. If Indian, Allotte	ee or Tribe Name			
SUBMIT IN TRIPLICATE – Other instructions on page 2.				7. If Unit of CA/Agreement, Name and/or No.					
1. Type of Well					NMNM70	945X			
☑ Oil Well ☐ Gas W	Vell Other			8	. Well Name and EMPIRE	No. ABO UNIT K 17			
2. Name of Operator BP AMERICA	PRODUCTION COMPAN	IY		9	. API Well No.	30-015-00703			
3a. Address P.O. BOX 1089, EUNICE NM	88231		(include area co 94-1648	ode) 1	10. Field and Pool or Exploratory Area EMPIRE ABO				
4. Location of Well (Footage, Sec., T.,	R., M., or Survey Description,)		1	11. Country or Parish, State				
UNIT LETTER L, 1980 FSL & 660 FWL	, SECTION 1, T18S, R27E				EDDY NM				
12. CHEC	CK THE APPROPRIATE BO	X(ES) TO IND	ICATE NATUR	E OF NOTICE	, REPORT OR O	THER DATA			
TYPE OF SUBMISSION			TY	PE OF ACTIC)N				
Notice of Intent	Acidize	Deep	en	Produc	tion (Start/Resume	e) Water Shut-Off			
	Alter Casing	Fract	ure Treat	Reclam	ation	Well Integrity			
✓ Subsequent Report	Casing Repair	New !	Construction	Recom	plete	Other			
	Change Plans	🔽 Plug	and Abandon	Tempo	rarily Abandon				
Final Abandonment Notice	Convert to Injection	Plug	Back	Water I	Disposal				
3/13/09: RIH W/ 4 3/4" BI 3/16/09: KILL WELL W/ 2 SCRAPER. RIH 20 SX CMT ON' TBG. FLUSH TE 3/17/09: POH W/ TBG. R WATER. TEST T TBG. DISPLACE FROM 3416' TO 3/18/09: RIH W/ TBG. TA CMT FROM 156 3/19/09: DIG OUT AROU 1" NIPPLE & VA	r final inspection.) SE TAC. NU BOP. POH L IT, CSG SCRAPER & 185 20 BBL BRINE. POH W/2 W/ CIBP & TBG. SET CIB VACUUM. DISPLACED W 3G W/ 10 BBL FRESH WA 3H W/ CIBP & 2 3/8" TBG. TO 500 PSI. TEST GOOD E CSG FROM 5160' TO SI 3175'. POH W/ TBG & SE G CMT @ 3152'. LAY DO 16' TO SURF. POH LAYIN IND WELLHEAD. CUT OF LVE, DRY HOLE MARKE	AYING DOWN JTS 2 3/8" TB STANDS TBG STANDS TBG JE 20 BBL FRE TER ON VAC SET CIBP @ . SPOT 25 SX JRFACE. POH ETTING TOOL WN 51 JTS TIG G DOWN TBG	I TBG: G TO 5787'. PG . POH W/ TBG JMP 25 BBL FI SH WATER OI UUM. 5420'. DISPLA CMT FROM 54 I LAYING DOV . RIH W/ SLOT ISG TO 1566'. M IND BOP. TO DRS AND WEL	OH W/ TBG T 6 & SCRAPER RESH WATEI N VACUUM. F ACE CSG W/ F 420' TO 5179' VN TBG TO 3 TED SUB ON MIX & PUMP 1 P OFF CSG V L HEAD, WEI	O 3523'. LAY DOWN R ON VACUUM POH LAYING DO FRESH LAY DOWN 8 416'. SPOT 25: 170 SX V/ 5 SX CMT. R LD IN PLATE, Approved as Liability und	I. PUMP OWN 11 JTS JTS SX CMT			
14. I hereby certify that the foregoing is tr Name (Primed/Typed) BARRY C.			Title AREA OPERATIONS TEAM LEAD			******			
Signature Date 03/23/2009			009		APPROVED				
	THIS SPACE	FOR FEDE	RAL OR ST	ATE OFFI	CE USE				
Approved by			Title			MAR 2 6 2009	i		
Conditions of approval, if any, are attached that the applicant holds legal or equitable tientitle the applicant to conduct operations to	itle to those rights in the subjec	not warrant or c	ertify			JAMES A. AMOS SUPERVISOR-EPS			

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.

(Instructions on page ?)

3/31/09

Form 3160-5 (April 2004)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

1	FORM APPROVED
	OMB NO. 1004-013
OCD-ARTESIA	Expires March 31, 200
	ease Serial No.
APR 15 20 GIMNIN	10557271

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for abandoned well. Use For	proposals to drill	or to re-e	nter an		6. If Indian	, Allottee	e or Tribe N	ame
SUBMIT IN TRIPLICATE - Other instructions on reverse side				I	7. If Unit or CA/Agreement, Name and/or No NMNM70945X			
1. Type of Well X Oil Well Gas Well Other 2. Name of Operator BP America Production Company					8. Well Na Empire K 9. API We	me and N Abo Un		
3a. Address P.O. Box 1089 Eunice NM 88231 4. Location of Well (Footage, Sec., T., R., M., or Survey)	Description)		e No. (<i>include ar</i> 5 - 394 - 1648	rea code) 	30-015- 10. Field Empire	and Pool,	, or Explora	lory Area
Unit Letter L, 1980 FSL & 660 FWL Section 1, T18S, R27E					11. Coun			NM
12. CHECK APPROPRIATE	BOX(ES) TO IND	DICATE I	NATURE OF	NOTICE, R	EPORT, OR	OTHER	RDATA	
TYPE OF SUBMISSION			TY	PE OF ACTI	ON			
Notice of Intent Subsequent Report X Final Abandonment Notice 13. Describe Proposed or Completed Operation (clear If the proposal is to deepen directionally or recompattach the Bond under which the work will be perfollowing completion of the involved operations. It testing has been completed Final Abandonment If determined that the final site is ready for final inspection.	plete horizontally, give s rformed or provide the If the operation results i Notices shall be filed or	F N P P P P P P P P P P P P P P P P P P	ocations and mea on file with BLM completion or r	Recla Reco Temp Water ing date of an sured and trui //BIA. Requis ecompletion i	e vertical depths red subsequent ro n a new interval,	and approof all per	rtinent mark all be filed v 3160-4 shall	ration thereof. ers and zones within 30 days be filed once
Per BLM letter referencing this was abandonment.	well, dated Marc	h 27, 2	009, all re	quirement	APF	PRC	OVEC 1 2009 AMOS OR-EPS	
14. I hereby certify that the foregoing is true and correct		Title						
Name (Printed/Typed) Bayry C. Price			Area O	perations	s Team Lead			
Banda (F -		Date						
THIS	S SPACE FOR FED	ERAL O		FICE USF				
Approved by			Title			Date		
Conditions of approval, if any, are attached Approval o	f this notice does not w	arrant or	Office			L		
certify that the applicant holds legal or equitable title to	those rights in the suh	ect lease	Onice					

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

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.