#### NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -1220 South St. Francis Drive, Santa Fe, NM 87505



### **ADMINISTRATIVE APPLICATION CHECKLIST**

THIS CHECKLIS	ST IS MANDAT		ISTRATIVE APPLICATE PROCESSING AT		PTIONS TO DIVISION RU EL IN SANTA FE	ILES AND REGULA	ATIONS
Application Acre			•			•	1 1 1 C
[DHC	·Downhole PC-Pool Ca	Commingling]	[CTB-Lease College   Colle	ommingling] Storage] [OL	SD-Simultaneous [PLC-Pool/Lease C M-Off-Lease Measu Itenance Expansion	commingling] urement]	5/5 p
	·	[SWD-Sait Water	Disposal] [IP	I-Injection Pres	ssure increase]	JH CV	
[EOR	-Qualified	Enhanced Oil Re	covery Certific	ation] [PPR-I	Positive Production	Response	- 02 gm
• •		CATION - Check cation - Spacing U NSL NSP	nit - Simultane		A ST	XIII Son S	12"
		Only for [B] or [C mmingling - Stora DHC [] CTI	ge - Measureme		ols 🗆 olm	2) La ES	Day Day
	C] Inje	ection - Disposal - WFX D PMC			Dil Recovery EOR PPR	3 7 m	any
[7	Oth	er: Specify	<del>-</del>			4)0	
[2] <b>NOTIFI</b> (	-	REQUIRED TO: Working, Royalt			or Does Not Appl t Owners		
[H	3] 🗌	Offset Operators	, Leaseholders o	or Surface Own	30-0	15-107	10
		Application is Or	ne Which Requ	ires Published L		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	
		Notification and/ U.S. Bureau of Land Mana	or Concurrent A	Approval by BL rof Public Lands, State	M or SLO Land Office		1
(E		For all of the abo	ve, Proof of No	tification or Pul	olication is Attached	d, and/or,	
[F	r) 🗆	Waivers are Attac	ched	e en	Ass.		1 1
		ATE AND COMP N INDICATED A		MATION RE	QUIRED TO PRO		YPE
4] CERTIFI approval is accura upplication until the	te and con	uplete to the best	of my knowledg	ge. I also under	with this application stand that no action e Division.	n for administra n will be taken	ative on this
er e gerege e	Note: Statem	nent must be comple	ted by an Individua	al with managerial	and/or supervisory cap	pacity.	 
Print or Type Name		Signature		Title		Date	<del></del>
				e-mail	Address		

STATE OF NEW MEXICE CONTROL ON CONSTRUCTION FOR AUTHORIZATION TO INJECT

Pressure Maintenance

No

**FORM C-108** Revised June 10, 2003

I.	PURPOSE: OLL CONsondary Recovery Pressure Maintenance Disposal Storage Application qualifies for abrinistrative approval? X Yes No
II.	OPERATOR: Latigo Petroleum, Inc.
	ADDRESS:550 W. Texas, Ste. 700, Midland, TX 79707
	CONTACT PARTY: Sabra Woody PHONE: (432) 684-4293
III.	WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.  Additional sheets may be attached if necessary.
IV.	Is this an expansion of an existing project? Yes X No  If yes, give the Division order number authorizing the project:
V.	Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
VI.	Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
VII.	Attach data on the proposed operation, including:
	<ol> <li>Proposed average and maximum daily rate and volume of fluids to be injected;</li> <li>Whether the system is open or closed;</li> <li>Proposed average and maximum injection pressure;</li> <li>Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,</li> <li>If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).</li> </ol>
*VIII.	Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
IX.	Describe the proposed stimulation program, if any.
*X.	Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted)
*XI.	Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
XII.	Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
XIII.	Applicants must complete the "Proof of Notice" section on the reverse side of this form.
XIV.	Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
	NAME: Sabra Woody TITLE: Engineering Technician
	SIGNATURE:DATE:DATE:
*	E-MAIL ADDRESS: swoody@latigopetro.com  If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal:

#### III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
  - (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
  - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
  - (3) A description of the tubing to be used including its size, lining material, and setting depth.
  - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
  - (1) The name of the injection formation and, if applicable, the field or pool name.
  - (2) The injection interval and whether it is perforated or open-hole.
  - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
  - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
  - (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

#### XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

														WELLBORE SCHEMATIC	WELL LOCATION: 720' FNL & 790' FWL UP	WELL NAME & NUMBER: Kimball Federal #1	OPERATOR: Latigo Petroleum, Inc.	Side 1 INJECTION
11,200		Total Depth: 11,500	Top of Cement: Surface	Cemented with: 1205	Hole Size: 7-7/8"		Top of Cement: 115	Cemented with: 1795	Hole Size: 12-1/4"		Top of Cement: Surface	Cemented with: 250	Hole Size: 17-1/2"		UNIT LETTER	30101		INJECTION WELL DATA SHEET
feet to_	Injection Interval			SX. OF	Cas	Production Casing	Me	SX. Or	Cas	Intermediate Casing		SX. <i>OT</i>	Cas	WELL CONSTR Surface Casing	6 SECTION T		いらる	
11,400 (Perfs)	1		Method Determined:Circ		Casing Size: 5-1/2"	₽ ₽	Method Determined: Fillup		Casing Size: 8-5/8"	ng <u>Qui</u>	Method Determined: Circ		Casing Size: <u>13-3/8"</u>	WELL CONSTRUCTION DATA Surface Casing	22 <u>S</u> 25 <u>E</u> TOWNSHIP RANGE			<i>!</i> ]

(Perforated or Open Hole; indicate which)

# INJECTION WELL DATA SHEET

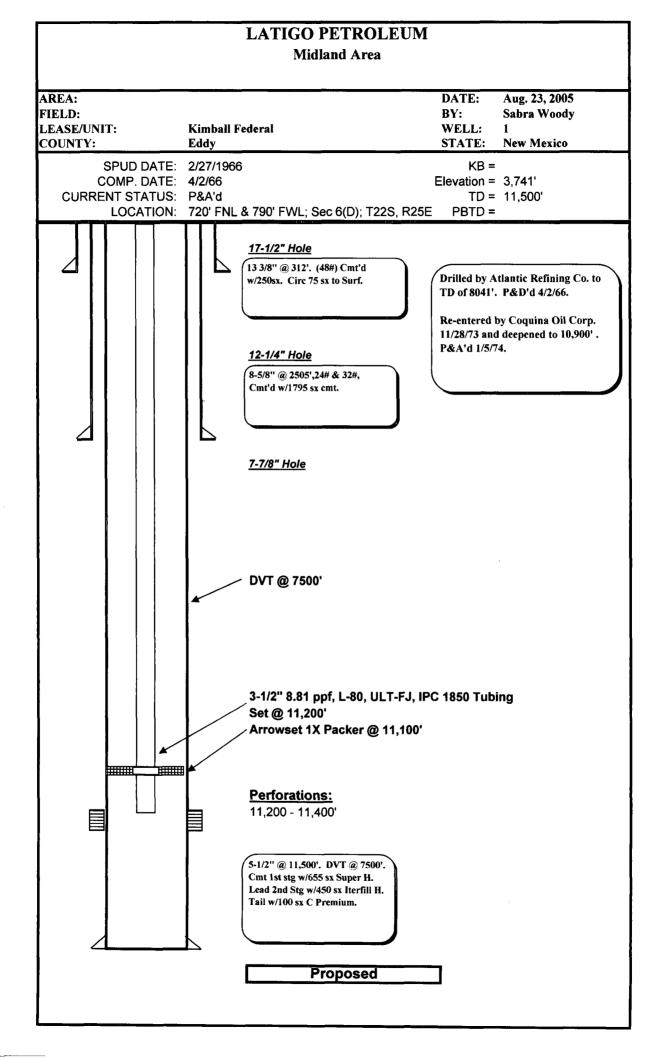
		5.		4.	$\dot{\omega}$	2.		-		<u>01</u>	Pac	Ty	Tu
Morrow 10,100°	Cisco/Canyon 8000'	Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:	See Wellbore Diagram	Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used.	Name of Field or Pool (if applicable): SWD – Devonian	Name of the Injection Formation: Devonian	If no, for what purpose was the well originally drilled? Oil Producer	Is this a new well drilled for injection? Yes X_No	Additional Data	Other Type of Tubing/Casing Seal (if applicable): N/A	Packer Setting Depth: 11,100	Type of Packer: Arrowset 1X	Tubing Size: 3-1/2" Lining Material: IPC 1850



# Application for Authorization to Inject

- VI. Attached is a tabulation of all wells of public record that fall within the ½ mile radius of the proposed injection well, the Kimball Federal #1. This investigation has further shown that this well has a good cement seal around the casing shoe and will therefore prevent the upward migration of the disposed water into any potable water zone.
- VII. The proposed average daily injection rate for the subject well is 30,000 BWPD; the maximum daily injection rate to be 50,000 BWPD. This is an open system with an average pressure of 1000 and a maximum pressure of 2200 psi. Only produced water from our Two Marks "36" State lease will be injected in the proposed well, so incompatibility will not be a problem.
- VIII. The injection zone is the Devonian which is projected to be between 11,200' and 12,200'. The source of fresh water in this area is the Capitan Reef formation at approximately 400'. There are no known sources of drinking water underlying the injection interval.
- IX. After perforation, the well will be stimulated with 20,000 gallons of 15% NEFE HCl and 10 ball sealers.
- X. Log and test data is on file with the Division.
- XI. Attached is an analysis of the water from the Two Marks "36" State Well No. 1, located approximately 3,000' northwest of the proposed injector. A chemical analysis was not available from any fresh water well.
- XII. The Kimball Federal #1 will be injecting produced water into the Devonian formation. The top of Devonian is projected to be encountered at an approximate depth of 11,200'. The base of Devonian is projected to be at an approximate depth of 12,200'. Gross thickness of the Devonian is approximately 1000'. Lithologically the Devonian is a dolomite with low porosities, however it is naturally fractured. The Woodford shale directly overlying the Devonian acts as a seal.
- XIII. The nearest fresh water well is 4,522' north of the Kimball Federal #1.
- XIV. The required "Proof of Notice" is attached.

#### **LATIGO PETROLEUM** Midland Area AREA: DATE: Aug. 23, 2005 BY: FIELD: Sabra Woody LEASE/UNIT: Kimball Federal WELL: COUNTY: **Eddy** STATE: New Mexico SPUD DATE: 2/27/1966 KB = COMP. DATE: 4/2/66 Elevation = 3,741TD = 10,900'CURRENT STATUS: P&A'd PBTD = LOCATION: 720' FNL & 790' FWL; Sec 6(D); T22S, R25E 10 Sx Plug 10 sx Plug @ 20 - 0' 17-1/2" Hole 13 3/8" @ 312'. (48#) Cmt'd Drilled by Atlantic Refining Co. to w/250sx. Circ 75 sx to Surf. TD of 8041'. P&D'd 4/2/66. Re-entered by Coquina Oil Corp. 11/28/73 and deepened to 10,900'. P&A'd 1/5/74. 12-1/4" Hole 8-5/8" @ 2505',24# & 32#, Cmt'd w/1795 sx cmt. 35 Sx Plug 35 sx Plug @ 2550 - 2450' 35 Sx Plun 35 sx Plug @ 3200 - 3100' Note: 8-5/8" Cmt - 3/7/66 -TOC @ 1470' per Temp Surv. Pmp'd 100 sx thru 1", est TOC @ 1428'. 1" pipe unscrewed leaving 40 jts in hole. Ran 3/4" tbg, could not get below 700'. Pmp'd 195 sx thru 1" @ 671'. Lost 24 jts of 3/4" tbg in hole. 35 Sx Plug 35 sx Plug @ 4800 - 4700' Could not get below 465'. Ran 25 sx @ 465'. Tagged @ 451'. Temp Surv 7-7/8" Open Hole showed cmt 440-800' & possible cmt @ 1000-1200'. Pmp'd 75 sx. Fillup @ 362'. Pmp'd 75 sx, fillup @ 282'. Pm'd 75 sx, fillup @ 115'. Tested to 1300# for 30 mins. 35 Sx Plug 35 sx Plug @ 6400 - 6300' 35 Sx Plug 35 sx Plug @ 8040 - 7940' BSS: Flog 35 sx Plug @ 9850 - 9750' Current



Well API# Location Location Section Range Type Depth Interval Completion Casing Casing Casing Casing Completion Casing Casing Completion Casing Casing Completion Casing Casing Completion Casing Casing Completion Casing Completion Casing Completion Casing Completion Casing Casi
6 T22S, R25E P&Ad 10,900 N/A 13-3/8" 312' 250 Surf-Circ 8-5/8" 2505 1795 115' - Fillup
Federal # 30-015-25269 860'S 700'W 31 T21S, R25E P&A'd 3960' NIA 13-3/8" 208' 300 Suff-Circ 6-5/8" 1501' 1325 Suff-Circ 5-1/2" 3860' 600 950'CBL

Form 3160-5 (November 1983)  UNI FD STATES	SUBMIT IN TRIPE	Budget Bureau N Expires August	Io. 1004–0135
(Formerly 9-331) DEPARTMEN OF THE INTE	RIOR verse side)	5. LEASE DESIGNATION A	
BUREAU OF LAND MANAGEME	MT 88210	NM-25345-A	
SUNDRY NOTICES AND REPORTS  (Do not use this form for proposals to drill or to deeped or pluse "APPLICATION FOR PERMIT—" for su	ON WELLS	6. IP INDIAN, ALLOTTEE	OR TEIBE NAME
OIL GAS OTHER Dry Hole	AUG 21 1986	7. UNIT AGREEMENT NAM	
2. NAME OF OPERATOR	O. C. D.	8. PARM OR LEASE NAME	t .
3. ADDRESS OF OPERATOR 13140 Cont Rd, State Scott	ARTESIA, OFFICE	Canon Champlin 9. WELL NO.	31 Federal
P. O. Box 2267, Midland, Texas 79702	ny State regulrements.*	10. FIELD AND POOL, OR	WILDCAT
See also space 17 below.) At surface		Wildcat Bone	Springs
660' FSL & 700' FWL, Sec. 31.		11. SBC., T., R., M., OR BL SURVEY OR AREA	
		Sec. 31, T21S	
14. PERMIT NO. 15. BLEVATIONS (Show whether 3666' GR	DF, RT, GR, etc.)	12. COUNTY OR PARISH Eddy	NM
	At At A D		<u>NPI</u>
16. Check Appropriate Box To Indicate			/26/85
	WATER SHUT-OFF	BEPAIRING WE	
FRACTURE TREAT  PULL OR ALTER CASING MULTIPLE COMPLETE	FRACTUBE TREATMENT	ALTERING CAS	
SHOOT OR ACIDIZE ABANDON*	SHOOTING OR ACIDIZING	ABANDONMENT	r• <u>X</u>
REPAIR WELL CHANGE PLANS	(Other)	its of multiple completion or	77.2
(Other)  17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertit proposed work. If well is directionally drilled, give subsurface is nent to this work.)*	Completion or Recor	apletion Report and Log form	n.)
11/22/85 - Set CIBP at 200' and dumped 3	5' cement on top.		
Spot 20 sacks Class H at 1543			
Perforated 4 holes at 260' -	pumped 40 sx Class H	cement, disp to 1	44".
Circ 15 sacks Class C 60 feet	to surface.		
Cut off wellhead & welded on	plate and dry-hole ma	rker.	
Well P&A 3:00 pm 11-22-85.			
	`		
lack			
18. I hereby critiy that the foregoing is true and correct SIGNED Betty Gildon TITLE F	Regulatory Analyst		85
(This space for Referal or State office use)			
APPROVED BY TITLE		DATE 8/3	586
CONTRACTO OF METHOTELY IF MIL.			

#### \*See Instructions on Reverse Side

Form 3160-4 Form approved. (November 1983) Budget Bureau No. 1004-0137 SUBMIT IN DUPL ULLIED STATES Expires August 31, 1985 (formerly 9-330) GAI. CONSTRUMENTATION 5. LEASE DESIGNATION AND SERIAL NO. DEPARTMENT OF THE INTERS BUREAU OF LAND MANAGEMENT NM 25345-A Artesia. NM 88210 6. IF INDIAN, ALLOTTEE OR TRIBE NAME WELL COMPLETION OR RECOMPLETION REPORT AND LOG\* IN TYPE OF WELL: DRY XX 7. UNIT AGREEMENT NAME L TYPE OF COMPLETION: WELL X S. FARM OR LEASE NAME Canon Champlin 群 Federal 2. NAME OF OPERATOR 9 WELL NO. HNG OIL COMPANY ADDRESS OF UPERATOR ROOD, جربن 16. FIELD AND POOL OR WILDCAT 60702. accordance with any Spite requirements) P. O. BOX Midland Wildcat /Bone Springs/
11. SEC. T., R., M., OR BLOCK AND SURVEY
OR AREA ARTESIA, O TOTAL At surface 660' FSL & 700 At top prod. interval reported below Sec. 31, T21S, R25E Same At total depth 12. COUNTY OR PARISH 14. PERMIT NO. DATE ISSUED 13. STATE Same Eddy 4/22/85 16. DATE T.D. REACHED 17. DATE COMPL. (Ready to prod.) 19. BLEV. CASINGHEAD 15. DATE SPUDDED 18. ELEVATIONS (DF, RKB, RT, GR, ETC.) 3666' GR 5/25/85 6/6/85 8/16/85 3666' 22. IF MULTIPLE COMPL., HOW MANY 23. INTERVALS 20. TOTAL DEPTH, MD 4 TVD 21. PLUG, BACK T.D., MD & TVD ROTARY TOOLS CARLE TOOLS DRILLED BY 2180' 38601 X 24. PRODUCING INTERVAL(S), OF THIS COMPLETION-TOP, BOTTOM, NAME (MD AND TVD) WAS DIRECTIONAL SURVEY MADE 2003-2079 No 26. TYPE BLECTRIC AND OTHER LOGS BUN 27. WAS WELL CORED Dual Laterolog, Compensated Neutron-Litho Density No CASING RECORD (Report all strings set in well) HOLE SIZE CEMENTING RECORD CARING SIZE WEIGHT, LR./FT. DEPTH SET (MD) AMOUNT PULLED 13-3/8" 54.5# 2081 17-1/2" 300 C1 C Circulated 8-5/8" 12-1/4" 24# 1501' 800 Lite & 525 C1 C Circulated 5-1/2" 7-7/8" 14# 3895 600 50/50 poz. LINER RECORD TUBING RECORD TOP (MB) BOTTOM (MD) PACKER SET (MD) 8122 BACKS CEMENTS SCREEN (MD) SIZE DEPTH SET (MD) 31. PERFORATION RECORD (Interval, size and number) ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. (.44"8)3712-3753 DEPTH INTERVAL (MD) AMOUNT AND KIND OF MATERIAL USED (.44"7)2234-2240 CIBP at 2510' + 20' cmt on top 3712-3753 (.35"20)2003-2079 2234-2240 CIBP at 2200' + 20' cmt on top 2003-2079 Frac w/40,000 gals mini-max III 30

				<u> </u>	lan	<u>d 100,0</u>	) <u>00# 12</u>	-20 sand
33.•		,	PRO	DUCTION				
DATE FIRST PRODUCT	TION PRODUCT	ION METHOD (Flo	wing, gae lift, p	umping—size an	d type of pump)		shut-in)	(Producing or nment Pending
DATE OF TEST	HOURS TESTED	CHOKE BIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS-MCF.	WATER	-BBL.	UAS-OIL BATIO
PLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIIBBI	SAG MA	Suel Sue	C) BL.	OIL GR	est ID-2
	las (Sold, used for fu	el, vented, etc.)		NO	/ 25 1985	TEST WI	THE GERESKY	
35. LIST OF ATTACH	MENTS				· · · · · · · · · · · · · · · · · · ·			

Logs

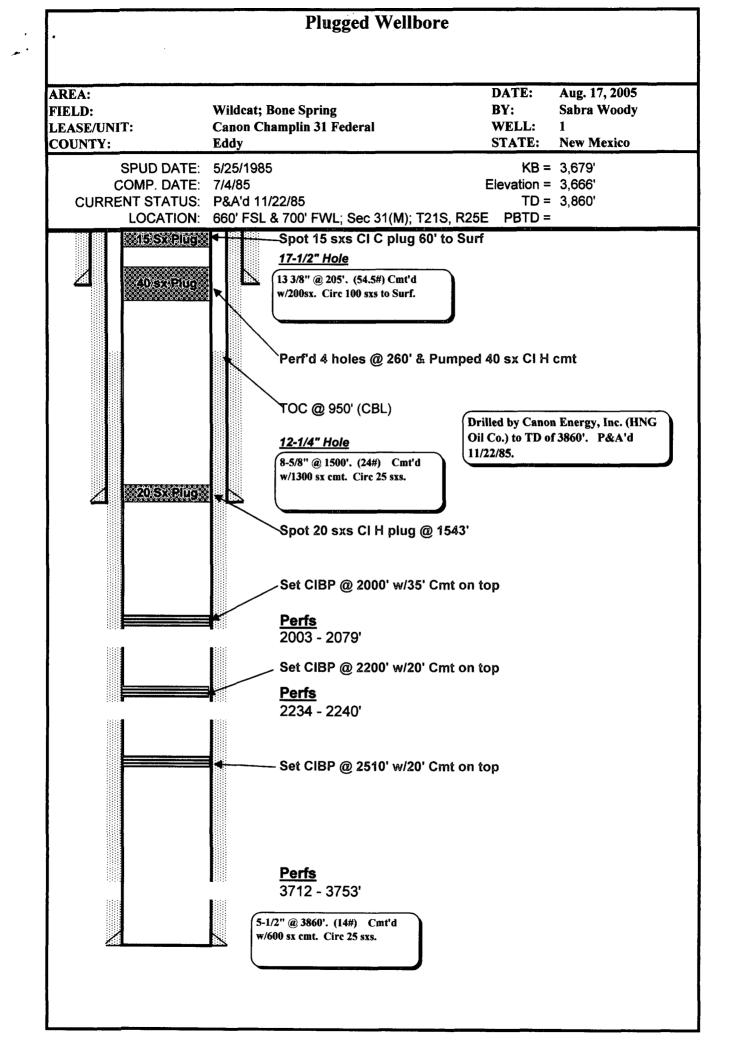
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

TITLE Regulatory Analyst

DATE \_11/20/85

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



#### MOBILE ANALYTICAL LABORATORIES, INC. P.O. BOX 69210 ODESSA, TEXAS 79769-0210 PHONE (432) 337-4744

5843

ANALYSIS REPORT

District.....

DATE: 06/20/05

Company..... OCCIDENTAL PERMIAN

Station.....

Field......

Lease/Plant.. TWO MARKS ST. 36-1

Sample..... GAS

County/State. EDDY/NM

Sample Pr/Temp 150 Psig 123 Deg

Operator.... LATIGO

Line Pr/Temp. Date Sampled. 06/14/05

Cylinder No ... H2S (ppm).... 10000

Sampled By.... JD

#### FRACTIONAL ANALYSIS

COMPONENT	MOL %	GPM C2+	GPM C5+	5
NITROGEN	0.69	0.000	0.000	ع ) د ر کار
CARBON DIOXIDE	0.73	0.000	0.000	
METHANE	87.60	0.000	0.000	£ 1/3
ETHANE	5.32	1.414	0.000	<i>(</i> )
PROPANE	1.97	0.539	0.000	
ISO-BUTANE	0.41	0.133	0.000	
N-BUTANE	0.78	0.245	0.000	
ISO-PENTANE	0.38	0.138	0.138	
N-PENTANE	0.31	0.112	0.112	
HEXANES +	0.81	0.351	0.351	
H2S	1.00	0.000	0.000	
TOTALS	100.00	2.932	0.601	

CALC. SP. GRAVITY 0.669 BTU/CU. FT. (14.65 PSIA, 60 DEG. F)

CALC. GROSS WET 1123 CALC. GROSS DRY 1143

DISTRIBUTION:

NOTES:

JEFF DECK (PGM)



#### **Affidavit of Publication**

NO.

18971

STATE OF NEW MEXIC

County of Eddy:

Gary D. Scott

being duly

\$worn,says: That he is the

Publisher of The

Artesia Daily Press, a daily newspaper of general circulation, published in English at Artesia, said county and county and state, and that the here to attached

#### Legal Notice

was published in a regular and entire issue of the said
Artesia Daily Press, a daily newspaper duly qualified
for that purpose within the meaning of Chapter 167 of
the 1937 Session Laws of the state of New Mexico for

1	consecutive	week/days	on the	same

day as follows:

First Publication

August

2005

11

Second Publication

Third Publication

Fourth Publication

Subscribed and sworn to before me this

12th

Day

August

2005

Notary Public, Eddy County, New Mexico

My Commission expires

September : 23, 2007

## Copy of Publication:

Legal Notice
Conversion To Water
Injection Well
ation Patroleum 556

Latigo Petroleum, 550
W. Texas, Fasten Tower
II, Sulte 700, Midland,
79701,
432-654-4293, contact
Sabra Woody, has made
application for a water injection well with the New
Mexico Oil Conservation
Commission. The well,
known as the Kimball
Federal #1, is locating
720' FNIL and 790' FNIL
UL D, Sec.

#### LEGAL NOTICE

County, New Marco. Disposal will be into the Dannian zone through perforations from 11,000' - 12,500'. Maximum rate and pressure is anticipated to be 39,090 Birro and 4400 PSI intended parties must file objections or requests for heaving with the New Medica Citics of the New Medica Citics Saint Francisco, 1220 Sente New Medica 82505 within filtens. 1151 days of this notice.

N.M. August 14



Fasken Center Tower II • 550 W. Texas, Suite 700 • Midland, Texas 79701 • 432-684-4293 • 432-684-0829 FAX

VIA CERTIFIED MAIL / RETURN RECEIPT REQUESTED

August 24, 2005

Donald W. Gregory 617 Queen Route Carlsbad, NM 88220

Re: Notification of Intent to Inject -

Kimball Federal #1

UL D; 720' FNL & 790' FWL; Sec 6-T22S-R25E

Eddy County, New Mexico

To Whom It May Concern:

Latigo Petroleum, Inc. has submitted an application to the New Mexico Oil Conservation Division requesting authority to inject water into the Kimball Federal #1.

The New Mexico Oil Conservation Division requires that all surface owners and leasehold operators within a one-half mile radius of the proposed injection well be sent copies of the Application for Authority to Inject. In compliance with this requirement, you will find copies of the application attached to this letter.

Any objections or requests for hearings must be filed with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505. If any questions arise concerning this matter, please contact me at (432) 684 - 4293.

Sincerely,

Sabra Woody

**Engineering Technician** 

**Attachments** 



Fasken Center Tower II, 550 W. Texas, Suite 700 Midland, Texas 79701

Donald W. Gregory 617 Queen Route Carlsbad, NM 88220



Fasken Center Tower II • 550 W. Texas, Suite 700 • Midland, Texas 79701 • 432-684-4293 • 432-684-0829 FAX

#### VIA CERTIFIED MAIL / RETURN RECEIPT REQUESTED

August 24, 2005

Yates Petroleum Corporation 105 South 4th Street Artesia, NM 88210

Re:

Notification of Intent to Inject -

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Sincerely,

Sabra Woody

**Engineering Technician** 

**Attachments** 



Fasken Center Tower II, 550 W. Texas, Suite 70 Midland, Texas 79701

Yates Petroleum Corporation 105 South 4th Street Artesia, NM 88210 U.S. Postal Service.

CERTIFIED MAIL., RECEIPT

Connestic Mail Only, No Insurance Coverage Provided)

For delivery information visit our website at www usps.com.

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Fasken Center Tower II • 550 W. Texas, Suite 700 • Midland, Texas 79701 • 432-684-4293 • 432-684-0829 FAX

#### VIA CERTIFIED MAIL / RETURN RECEIPT REQUESTED

August 24, 2005

Nearburg Producing Co. P.O. Box 823085 Dallas, TX 75382

Re:

Notification of Intent to Inject -

Kimball Federal #1

UL D; 720' FNL & 790' FWL; Sec 6-T22S-R25E

Eddy County, New Mexico

To Whom It May Concern:

Latigo Petroleum, Inc. has submitted an application to the New Mexico Oil Conservation Division requesting authority to inject water into the Kimball Federal #1.

The New Mexico Oil Conservation Division requires that all surface owners and leasehold operators within a one-half mile radius of the proposed injection well be sent copies of the Application for Authority to Inject. In compliance with this requirement, you will find copies of the application attached to this letter.

Any objections or requests for hearings must be filed with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505. If any questions arise concerning this matter, please contact me at (432) 684 - 4293.

Sincerely,

Sabra Woody

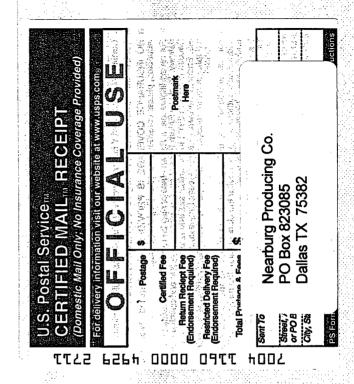
**Engineering Technician** 

**Attachments** 



Fasken Center Tower II, 550 W. Texas, Suite 7 Midland, Texas 79701

Nearburg Producing Co. P.O. Box 823085 Dallas, TX 75382





Fasken Center Tower II • 550 W. Texas, Suite 700 • Midland, Texas 79701 • 432-684-4293 • 432-684-0829 FAX

#### VIA CERTIFIED MAIL / RETURN RECEIPT REQUESTED

August 24, 2005

Chesapeake Operating, Inc. P.O. Box 18496 Oklahoma, OK 73154-0496

Re:

Notification of Intent to Inject -

Kimball Federal #1

UL D; 720' FNL & 790' FWL; Sec 6-T22S-R25E

Eddy County, New Mexico

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Sabra Woody

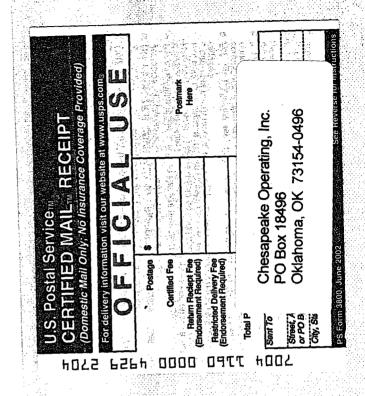
**Engineering Technician** 

**Attachments** 



Fasken Center Tower II, 550 W. Texas, Suite 700 Midland, Texas 79701

Chesapeake Operating, Inc. P.O. Box 18496 Oklahoma, OK 73154-0496



#### Jones, William V., EMNRD

From: Jones, William V., EMNRD

Sent: Thursday, September 01, 2005 7:35 PM

To: 'swoody@latigopetro.com'

Subject: SWD Application for the Kimball Federal #1

#### Hello Ms. Sabra Woody:

The Division received your application to inject on August 29, 2005. After a review of the application....

1) Please send a copy of a water analysis on the Two Marks 36 State Well No. 1 and state which formation this well produces from. (You had sent a Gas analysis with the application - apparently this is a high H2S area.)

Thank You,

William V. Jones

Engineering Bureau

Oil Conservation Division

Santa Fe



# Memo

To: William V. Jones

From: Sabra Woody

cc: Bryan Arrant

**Date:** 9/2/2005

Re: Kimball Federal #1 Injection Application – Water Analysis

Attached is a water analysis from the Two Marks "36" State #1. The water was produced from the Indian Basin, Upper Penn Assoc. pool.

**Enclosure** 



#### MILLER CHEMICALS, INC.

Post Office Box 298 Artesia, N.M. 88211-0298 (505) 746-1919 Artesia Office (505) 392-2893 Hobbs Office (505) 746-1918 Fax

#### WATER ANALYSIS REPORT

: JUNE 6th, 2005 : LATIGO Company Date Sampled: JUNE 3rd, 2005 Address TWO MARKS LIGHTSTATE Analysis No. : Lease Well Sample Pt. mg/L \* meq/L ANALYSIS рΗ 6.9 1. 2. H2S 120 3. Specific Gravity 1.005 9984.0 Total Dissolved Solids Suspended Solids
 Dissolved Oxygen NR NR 7. Dissolved CO2 NR 8. Oil In Water NR 9. Phenolphthalein Alkalinity (CaCO3) 10. Methyl Orange Alkalinity (CaCO3) 1464.0 HCO3 нсоз 24.0 11. Bicarbonate 4899.0 138.2 12. Chloride Cl Cl 13. Sulfate SO4 500.0 SO4 14. Calcium Ca 1360.0 Ca 67.9 15. Magnesium 753.8 Mg 62.0 Mg 16. Sodium (calculated) 982.1 Na ¥ 42.7 Na 17. Iron Fe 25.0 18. Barium Ba NR 19. Strontium NR

#### PROBABLE MINERAL COMPOSITION

6500.0

*milli equivalents per Liter	Compound E	Cquiv wt X	meq/L =	mg/L
++				
68  *Ca < *HCO3   24	Ca (HCO3) 2	81.0	24.0	1945
/	CaSO4	68.1	10.4	7 <b>C</b> 9
62  *Mg=> *SO4   10	CaCl2	53.5	33.5	1856
<	Mg (HCO3) 2	73.2		
43: *Na> *Cl   138	MgSO4	60.2		
++	MgCl2	47.6	62.0	2952
Saturation Values Dist. Water 20 C	NaHCO3	84.0		
CaCO3 13 mg/L	Na2SO4	71.0		
CaSO4 * 2H2O 2090 mg/L	NaCl	58.4	42.7	2497
BaSO4 2.4 mg/L			¥	

REMARKS:

-----

20. Total Hardness (CaCO3)

#### SCALE TENDENCY REPORT

: LATIGO Company

Date : JUNE 6th, 2005

Address

: TWO MARKS "36" STATE

Date Sampled : JUNE 3rd, 2005

Lease

Analyst : S. TIGERT

Analysis No. :

: #1 Well Sample Pt. : WELLHEAD

#### STABILITY INDEX CALCULATIONS (Stiff-Davis Method) CaCO3 Scaling Tendency

S.I. = 1.2 at 70 deg. F or 21 deg. C 1.2 at 90 deg. F or 32 deg. C S.I. = 1.2 at 110 deg. F or 43 deg. C 1.3 at 130 deg. F or 54 deg. C 1.3 at 150 deg. F or 66 deg. C S.I. = S.I. = s.1. =

#### CALCIUM SULFATE SCALING TENDENCY CALCULATIONS (Skillman-McDonald-Stiff Method) Calcium Sulfate

S = 1705 at 70 deg. F or 21 deg C 1765 at 90 deg. For 32 deg C 1793 at 110 deg. For 43 deg C 1785 at 130 deg. For 54 deg C 1763 at 150 deg. For 66 deg C S = S = S = S =

Respectfully submitted,

# M. M. O. C. C. COPY

Copy to SF

Form 9-331 C (May 1963)

SUBMIT IN TRIPLICATE\*

(Other instructions on reverse side)

Form approved. Redget Bareau No. 42-R1425.

#### UNITED STATES DEPARTMENT OF THE INTERIOR

DEPARTMENT OF THE	INTERIOR	;	5. LEASE DESIGNATION AND RERIAL NO.
GEOLOGICAL SUR	VEY	İ	NM 8666 🖟 🚅
APPLICATION FOR PERMIT TO DRILL,	DEEPEN, OR PLUG B	ACK	G. IE INDIAN, ALLOTTES OR TRIBE NAME
1a. TYPE OF WORK DOWN REENTING DEEDEN	V7		7. UNIT AGREEMENT NAME
DRILL . DECPEN	PLUG BAC	_K	
D. TYPE OF WELL.	SINGLE MULTIP	LS:	S. FARM OR LEASE NAME
WELL OTHER  2. NAME OF OPERATOR	ZONE A ECE	٠٠,	▶ Kimball-Federal
Coquina Oil Corporation	,		9. WELL NO.
3. Spress of Operator	101/0	1070	
200 Bldg of Southwest Midland	Tayas 7970	1 1973	10. PIGLD AND POOL OR WILDCAT
200 Bldg. of Southwest, Midland,	with any State requirements	<b></b>	Wildcat 1
720' FNL & 790' FWL of Sec. 6	. O. S	IVE	1. SEC., T., R., M., OR BEE.
AA maamaad maad aana	U o 'Kertegia.		ARD SCRYET OR AREA
Same	V. S. GEOLOGIA	1973	Sec.6, T22S, R25E
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR PO	ST OFFICE. THE ESIA GICA	/ 0	12. COUNTY OR PARISH 13, STATE
11 miles West of Carlsbad, New M	S. GEOLOGICA EXICO 16. NO. OF AUTEN IN LEASE 160	URYE	Eddy N.M.
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST	16. NO. OF ACRES IN LEASE	CO OF	ACRES ASSIGNED S WELL
PROPERTY OF LEASE LINE, FT. (Also to nearest drig, unit line, if any)	160	1	40
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED,	19, PROPOSED DEPTH	20. ROTARY	OR CABLE TOOLS
OR APPLIED FOR, ON THIS LEASE, FT.	11,750'	Ro	tary +
21. ELEVATIONS (Show whether DF, RT, GR. etc.)			22. APPROX, DATE WORK WILL START*
G. L. 3741'			November 16; 1973
22. PROPOSED CAS	ING AND COMENTING PROGRA	1M	
SIZE OF HOLE SIZE OF CASING WEIGHT PER	FOOT SETTING DEPTH	1	QUANTITY OF CHMENT
17 1/2" 13 3/8" 48	312		250 sx.
12 1/4" 8 5/8" 24 & 32	2505	1	250 sx.
7 7/8" 5 1/2" 15.5&17	11750	1	800 sx.
· 1	ì	F	
The subject well was originally drilled	d by <u>Atlantic Refinir</u>	ng Co. a	s their #3 Walt Canyon
Unit to a total depth of 8041 feet. Fi	ound to be non-produc	tive an	d plugged and abandoned
on April 2, 1966. The following tops w	vere picked from orig	inal lo	g: Dela lime 2504';
Bone Spring 4667; Wolfcamp Sd 7179;	dolfcamp Shale 7543';	, Cisco	8007'. A DST in the
Cisco recovered 7125' GC sulphur water	. It is our intention	on to cli	ean out the old hole
to 8041' and drill a new 7 7/8" hole to	test the Devonian a	it appro	x. 11,600 None of
the 13 3/8" casing or 8 5/8" casing was	s pulled when origina	IIIY PAA	. We will nipple up
BOP stack as per attached sketch and to Wolfcamp Sand depth is reached, pit vo	lume totalizes flow s	res. A	t such time as the
will be installed on the mud system.	I salt water nel mud	evetom	nd pump Stroke counter
and water loss will be maintained to to	otal denth Should o	ommorci.	al production be on
countered by total depth, 5 1/2" casing	Will he run and cem	u hatna:	ith adoquate coment
volume to properly protect the producing	ng zone.	icireca n	ron adequate cement
• • • • • • • • • • • • • • • • • • • •	3		\$ <b>\$</b>
IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to descent. If proposal is to drill or deepen directionally, give pertine presenter program, if any, 24.	eepen or plug back, give data on punt data on subsurface locations at	resent produc of measured a	tive zone and proposed new productive and true vertical depths. Give blowent
		•	1
the state of the s	Superintenden	t	11-13-73
(This space for Federal or State office use)	NOV	2 0 197	3
PERMIT NO.	APPROVAL DATE	·	

BRUD MEDINAL IS BELLENDED IS DECEMBED AND See Instruction. On Reverse Side

# INSTRUCTIONS

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 agency 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 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. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be extented for specific instructions.

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If not filed prior to the time this sound be extracted by applicable State requirements. Consult local State or Federal office for specific instructions.

If not filed prior to the specific instructions.

If not supplicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements.

If not supplicable State requirements, locations for the interval supplicable state reports on this form, adequately identified, for each additional minerval to be separately supplied to supplied the separately supplied supplied for supplicable supplied for supplicable supplied for supplicable supplied for supplicable supplied for 
	TOP	EPTH TRUE VERT. DEPTH	Sarface	1015	0		1545	2505		3646		1001	7198	7500	8004	<del>-</del>	
		MEAS. DEPTH	Yates-7 Rivers Su	mt.aeteo	atisted	Shelf-Besin	Francition zone 1:	Delaware Mtn 2:	frans-		Bone Spring	<b>~</b>			Pennsylvanian 8(		
	-	<b>4 5 1</b>	Yates		Gryburg-SA (Updiffere	Shelf	Transi	Delaw	Yeso Trans-	ition sone	Bone 8	Lime	Desn Sand	Wolfcamp	Pennsy		
DEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES	DESCRIPTION, CONTRNTS, ETC.		pen hole 8014-8041, Took 5 min preflow, Took	ra. GT	The series areas areas	PP = 3	A.										
DEPTH INTERVAL TESTED, CUBHION UBED, TIME TWOL OFEN, FLOWIN	BOTTOM		ting Penn (Cisco) o BC, 1/2" TC, Ho WC.	open 2 1		7	<b>*</b>	•					****				
BEPTH INTERVAL TESTED, CUBHION UBED, TIME TWOL OPEN, FLOWIN	101		ing Penn	ISI. Tool		1MP = 36	TOTAL W	7191 = 331	7136								
DEPTH INTERVAL	FORMATION		15/16" BC, 1/2" TC, No WC. Took	75 min I			2						:	-			

3 73 **34** 

or both, pursuant to applicable 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 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 agency or a State agency. and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

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11 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.

Hems 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in Item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval. It Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Hem 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

37. SCMMARY OF POHOUS ZONES	HOUS ZONES:	MARY OF POHOUS ZOURS:		01000	Scand of October	
DELTH INTERVA	L TESTED, CUSITION	DEFTH INTERVAL TESTED, CUSHION USED, TIME TOUR OFEN, PLOWING	OFFN, FLOWING AND SHITEIVALS, AND ALL DAILLESTES, INCLUDING THEN, FLOWING AND SHIT-IN TRESSURES, AND RECOVERIES		GIC MARKERS	
FORMATION	TOL	BOTTOM	DESCRIPTION, CONTENTS, ETC.		TOP	ı.
				NAME	MEAS. DEPTH	TRUE VERT. DEPTH
Strawn	9390	0096	Ls.		u	
Atoka	0096	10065	Ls., Sh., Sd.			
Morrow	10065	10479	Sd., Sh., Ls.,			
			DST #1 - 10,151-10,180'			
			15" ID 66-110 psi			
			ISI 3828		····	
			=			
			120 FSI 3762'			
			9			
				. •		
			DST #2 10,253-10,358'	-		
			出	-		-
•	•		60" ISI Not recorded			
			FF 10		<del></del>	
			120" FSI 1247 psi			-
			120	-		-
-						
		-	#3 10,400-10,427'			
			42-42 psi; 6	* -	•	
•			FF 42-42 psi; 120"			
Chester	10795	10900	85' mud.	•		

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

SIGNED. Lanc Kedila Duane Radtke TITLE Engineer

(This space for Federal or State office use)

APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL IF ANY:

\*See Instructions on Reverse Side

ACTING DISTRICT SAICINEER