

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
ACD-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE

Operator: License # 5242

Name: Petroleum Management, Inc.

Address 14201 E. Central

City/State/Zip Wichita, KS 67230

Purchaser: Farmland

Operator Contact Person: Steven P. O'Neill

Phone (316) 733-5600

Contractor: Name: Murfin Drilling Co., Inc.

License: 30606

Wellsite Geologist: Steve Davis

Designate Type of Completion

- New Well Re-Entry Workover
- Oil SWD SIOW Temp. Abd.
- Gas ENHR SIGW
- Dry Other (Core, WSW, Expl., Cathodic, etc)

If Workover/Re-Entry: old well info as follows:

Operator: _____

Well Name: _____

Comp. Date _____ Old Total Depth _____

- Deepening Re-perf. Conv. to Inj/SWD
- Plug Back PSTD
- Commingled Docket No. _____
- Dual Completion Docket No. _____
- Other (SWD or Inj?) Docket No. _____

06-30-93 ✓ 07-04-93 8-17-93 ✓
Spud Date Date Reached TD Completion Date

API NO. 15- 147-20552 ^{100 00}

County Phillips

100'S C - N/2-NE/4 Sec. 12 Twp. 4S Rng. 19 ^E _W

760 ✓ Feet from S (circle one) Line of Section

1320 ✓ Feet from E/W (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:
NE, SE, NW or SW (circle one)

Lease Name Mont Sol Unit ✓ Well # M-3

Field Name Mont Sol ✓

Producing Formation LKC

Elevation: Ground 1978' ✓ KB 1983'

Total Depth 3424' PSTD 3600'

Amount of Surface Pipe Set and Cemented at 211 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set _____ Feet

If Alternate II completion, cement circulated from TD

feet depth to surface w/ 465 sx cmt.

Drilling Fluid Management Plan alt II of CB 9-2-93
(Data must be collected from the Reserve Pit)

Chloride content 1500 ppm Fluid volume 1000 bbls

Dewatering method used allow to dry

Location of fluid disposal if hauled offsite: _____

Operator Name _____

Lease Name _____ License No. _____

Quarter _____ Sec. _____ Twp. _____ S Rng. _____ E/W

County _____ Docket No. _____

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature [Signature]
Title Vice President Date 8/26/93

Subscribed and sworn to before me this 26th day of August, 19 93.

Notary Public [Signature]

Date Commission Expires _____

KATHLEEN L. CARTER
NOTARY PUBLIC
STATE OF KANSAS
MY APPT. EXPIRES 4-29-95

Rec'd 8-27-93

K.C.C. OFFICE USE ONLY	
F	<input checked="" type="checkbox"/> Letter of Confidentiality Attached
C	<input checked="" type="checkbox"/> Wireline Log Received
C	<input checked="" type="checkbox"/> STATE CORPORATION COMMISSION Geologist Report Received
AUG 27 1993	
<input checked="" type="checkbox"/> KCC	<input type="checkbox"/> SWD/Rep
<input type="checkbox"/> KGS	<input type="checkbox"/> Plug
NGPA	
Other	
CONSERVATION DIVISION (Specify)	
Wichita, Kansas	

SIDE TWO

Operator Name Petroleum Management, Inc. Lease Name Mont Sol Unit Well # M-3

Sec. 12 Twp. 4S Rge. 19 East West
 County Phillips

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken (Attach Additional Sheets.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input checked="" type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Anhydrite	1552	+443
Electric Log Run (Submit Copy.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	B/Anhydrite	1581	+414
List All E.Logs Run:		Oread	3127	-1132
		Heebner	3168	-1173
		Lansing	3207	-1212
		B/KC	3421	-1126

GR - NEU - CBL

CASING RECORD <input type="checkbox"/> New <input checked="" type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
surface	12 1/4"	8-5/8"	28	211'	60/40	135	2%Gel 3%CC
production	7-7/8"	5 1/2"	14	3423'	HLC & EA2	465	

ADDITIONAL CEMENTING/SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
Perforate				
Protect Casing				
Plug Back TD				
Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
2	3359-63'; 3337-41'; 3302-08'; 3282-84'; 3288-91 & 3204-08'	3000 Gal 15% MCA	3204-3363

TUBING RECORD	Size 2 3/8"	Set At 3375'	Packer At N/A	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumed Production, SMD or Inj.	8-24-93	Producing Method	<input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)	
Estimated Production Per 24 Hours	Oil Bbls. 41	Gas Mcf 0	Water Bbls. 8	Gas-Oil Ratio 35°

Disposition of Gas: Vented Sold Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION: Open Hole Perf. Dually Comp. Commingled Other (Specify)

Production Interval: 3204-3363'

CUSTOMER COPY



REMIT TO:
P.O. BOX 951046
DALLAS, TX 75395-1046

INVOICE

INVOICE NO.	DATE
508226	07/04/1993

WELL LEASE NO./PROJECT		WELL/PROJECT LOCATION		STATE	OWNER
MONT SOL M-3		PHILLIPS		KS	SAME
SERVICE LOCATION		CONTRACTOR	JOB PURPOSE		TICKET DATE
OBERLIN		MURFIN DRILLING #3	CEMENT PRODUCTION CASING		07/04/1993
ACCT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA	FILE NO.
682850	DON KEENER			COMPANY TRUCK	53000

PETROLEUM MANAGEMENT INC
BOX H,
PLAINVILLE, KS 67663

X
DK

DIRECT CORRESPONDENCE TO:
FIRST OKLAHOMA TOWER
210 WEST PARK AVENUE
SUITE 2050
OKLAHOMA CITY, OK 73102-5601

REFERENCE NO.	DESCRIPTION	QUANTITY	UM	UNIT PRICE	AMOUNT
PRICING AREA - MID CONTINENT					
000-117	MILEAGE	60	MI	2.75	165.00
		1	UNT		
001-016	CEMENTING CASING	3424	FT	1,285.00	1,285.00
		1	UNT		
030-018	CEMENTING PLUG SW, PLASTIC T	5 1/2	IN	65.00	65.00
		1	EA		
12A	GUIDE SHOE - 5 1/2" 8RD THD.	1	EA	121.00	121.00
825.205					
24A	INSERT FLOAT VALVE - 5 1/2" 8RD	1	EA	110.00	110.00
815.19251					
27	FILL-UP UNIT 5 1/2"-6 5/8"	1	EA	55.00	55.00
815.19311					
40	CENTRALIZER 5-1/2" X 7 7/8"	9	EA	44.00	396.00
807.93022					
320	CEMENT BASKET 5 1/2"	3	EA	110.00	330.00
800.8883					
504-308	CEMENT - STANDARD	90	SK	7.87	708.30
508-127	CAL SEAL 60	4	SK	20.70	82.80
509-968	SALT	390	LB	.13	50.70
507-153	CFR-3	43	LB	4.55	195.65
507-970	D-AIR 1, POWDER	21	LB	3.10	65.10
508-291	GILSONITE BULK	900	LB	.40	360.00
504-316	CEMENT - HALL. LIGHT STANDARD	375	SK	7.19	2,696.25
507-277	HALLIBURTON-GEL BENTONITE	14	SK	15.50	217.00
507-210	FLOCELE	94	LB	1.40	131.60
500-207	BULK SERVICE CHARGE	528	CFT	1.25	660.00
500-306	MILEAGE CMTG MAT DEL OR RETURN	1359.96	TMI	.85	1,155.97

INVOICE SUBTOTAL

RECEIVED
STATE CORPORATION COMMISSION
8,850.37

AUG 27 1993

CONSERVATION DIVISION
Wichita, Kansas

***** CONTINUED ON NEXT PAGE *****

TERMS: If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If customer has an approved open account, invoices are payable on the twentieth day after date of invoice. Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, Customer agrees to pay attorney fees of 20% of the unpaid account, plus all collection and court costs.

CUSTOMER COPY

REMIT TO:
P.O. BOX 951046
DALLAS, TX 75395-1046



INVOICE

INVOICE NO.	DATE
508226	07/04/1993

WELL LEASE NO./PROJECT	WELL/PROJECT LOCATION	STATE	OWNER
MONT SOL M-3	PHILLIPS	KS	SAME

SERVICE LOCATION	CONTRACTOR	JOB PURPOSE	TICKET DATE
OBERLIN	MURFIN DRILLING #3	CEMENT PRODUCTION CASING	07/04/1993

ACCT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA	FILE NO.
682850	DON KEENER			COMPANY TRUCK	53000

PETROLEUM MANAGEMENT INC
BOX H,
PLAINVILLE, KS 67663

X
DJK

DIRECT CORRESPONDENCE TO:
FIRST OKLAHOMA TOWER
210 WEST PARK AVENUE
SUITE 2050
OKLAHOMA CITY, OK 73102-5601

REFERENCE NO.	DESCRIPTION	QUANTITY	UM	UNIT PRICE	AMOUNT
	DISCOUNT-(BID)				2,849.78-
	INVOICE BID AMOUNT				6,000.59
	*-KANSAS STATE SALES TAX				244.16
	*-DECATUR COUNTY SALES TAX				49.82
INVOICE TOTAL - PLEASE PAY THIS AMOUNT					\$6,294.57

RECEIVED
AUG 27 1993
WICHITA, KANSAS

TERMS: If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If customer has an approved open account, invoices are payable on the twentieth day after date of invoice. Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, Customer agrees to pay attorney fees of 20% of the unpaid account, plus all collection and court costs.



CHARGE TO: **Petroleum Management Inc**
 ADDRESS: **P.O. Box H**
 CITY, STATE, ZIP CODE: **Planville KS 67663**

RECEIVED
 OPERATIONS COMMISSION
 AUG 27 1993
 RESERVATION DIVISION
 Wichita, Kansas

TICKET **508226 - 4**
 PAGE **1** OF **2**

FORM 1906 R-12

1. SERVICE LOCATIONS Oberlin KS	WELL/PROJECT NO. M-3	LEASE Mont Sol	COUNTY/PARISH Phillias	STATE KS	CITY/OFFSHORE LOCATION Oberlin KS	DATE 7-4-93	OWNER PMI
2. TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	NITROGEN JOB? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	CONTRACTOR Murfin Dng	RIG NAME/NO. Murfin Dng Rig 3 2591	SHIPPED VIA Wellserve KS	DELIVERED TO	ORDER NO.	
3. WELL TYPE 01	WELL CATEGORY 01	JOB PURPOSE 035	WELL PERMIT NO. 15-147-20552	WELL LOCATION N. Speed KS			
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT
		LOC	ACCT	DF			QTY.	U/M				
00-117		1		322		MILEAGE 2591	60	mi			2.25	165.00
001-016		1		322		Pump Charge	3424	ft				1285.00
030-018		1		322		5W Top Plug	1	EA	5 1/2 in		65.00	65.00
12A	825.205	1		322		Reg. Guide Shoe	1	EA	5 1/2 in		121.00	121.00
24A	815.19251	1		322		Insert Float Valve	1	EA	5 1/2 in			110.00
27	815.19311	1		322		Auto Fill Tube	1	EA	1 in			55.00
40	807.93022	1		322		S-4 Centralizers	9	EA	5 1/2 in		44.00	396.00
320	800.8883	1		322		Cmtr. Baskets	3	EA	5 1/2 in		770.00	2310.00

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY** provisions.

CUSTOMER OR CUSTOMER'S AGENT SIGNATURE
 X *Don Keener*
 DATE SIGNED **7-4-93** TIME SIGNED **2030** A.M. P.M.
 do do not require IPC (Instrument Protection). Not offered

SUB SURFACE SAFETY VALVE WAS:
 PULLED & RETURN PULLED RUN

TYPE LOCK	DEPTH	
BEAN SIZE	SPACERS	
TYPE OF EQUALIZING SUB.	CASING PRESSURE	
TUBING SIZE	TUBING PRESSURE	WELL DEPTH
TREE CONNECTION	TYPE VALVE	

SURVEY: AGREE UN-DECIDED DIS-AGREE

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?	<input checked="" type="checkbox"/>
WE UNDERSTOOD AND MET YOUR NEEDS?	<input checked="" type="checkbox"/>
OUR SERVICE WAS PERFORMED WITHOUT DELAY?	<input checked="" type="checkbox"/>
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?	<input checked="" type="checkbox"/>
ARE YOU SATISFIED WITH OUR SERVICE?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND	

PAGE TOTAL	2527.00
FROM CONTINUATION PAGE(S)	6323 37
SUB-TOTAL APPLICABLE TAXES WILL BE ADDED ON INVOICE	8850 37

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

CUSTOMER OR CUSTOMER'S AGENT (PLEASE PRINT) <i>Don Keener</i>	CUSTOMER OR CUSTOMER'S AGENT (SIGNATURE) X <i>Don Keener</i>	HALLIBURTON OPERATOR/ENGINEER <i>Jack Moore</i>	EMP # 34685	HALLIBURTON APPROVAL <i>Jerry C. Harrison</i>
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TICKET CONTINUATION

COPY

TICKET No. 508226

CUSTOMER <i>Petroleum Management, Inc.</i>	WELL <i>m-3 Mount-50 Unit</i>	DATE <i>7-4-93</i>	PAGE OF <i>2 2</i>
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FORM 1911 R-9

PRICE REFERENCE	SECONDARY REFERENCE / PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	QTY.		U/M	QTY.	U/M	UNIT PRICE		AMOUNT	
		LOC	ACCT	DF											
504-308		1		32.2		Std. Cement	90		sk			7 87	708	30	
508-127		1		32.2		Cal Seal	4		sk			20 70	82	80	
509-968		1		32.2		Salt Granulated	390		lb			13	50	70	
507-153		1		32.2		CFR-3	43		lb			4.54 35	187	05	
507-970		1		32.2		D Air-1	21		lb			3.10	65	10	
508-291		1		32.2		Gilsonite	900		lb			40	360	00	
504-316		1		32.2		Halliburton Light Cement	375		sk			7 19	2696	25	
507-277		1		32.2		Halliburton Gel mixed add ^{4%}	14		sk			15 50	217	00	
507-210						Flocele	94		lb			1.40	131	60	
500-207		1				SERVICE CHARGE				CUBIC FEET	528	1 25	660	00	
500-306		1				MILEAGE CHARGE	TOTAL WEIGHT	45,332	LOADED MILES	60	TON MILES	1359.96	85	1155 97	

CONTINUATION TOTAL *6328 37*

WELL DATA
FIELD Mont Sol SEC. 12 TWP. 4S RNG. 19W COUNTY Phillips STATE KS

FORMATION NAME _____ TYPE _____
FORMATION THICKNESS _____ FROM _____ TO _____
INITIAL PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD _____
PRESENT PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD _____
COMPLETION DATE _____ MUD TYPE _____ MUD WT. _____
PACKER TYPE _____ SET AT _____
BOTTOM HOLE TEMP. _____ PRESSURE _____
MISC. DATA _____ TOTAL DEPTH 3424

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	<u>U</u>	<u>14</u>	<u>5 1/2</u>	<u>KB</u>	<u>3420</u>	
LINER						
TUBING						
OPEN HOLE			<u>7 7/8</u>		<u>3424</u>	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

JOB DATA

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>7-4-93</u> TIME <u>7:15</u>	DATE <u>7-4-93</u> TIME <u>19:20</u>	DATE <u>7-4-93</u> TIME <u>22:50</u>	DATE <u>7-5-93</u> TIME <u>01:05</u>

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
Float Collar <u>Insert Float Valve 2" 1 EA</u>	<u>1 EA</u>	<u>Howco</u>
Float Shoe <u>Auto Fill tube 1"</u>	<u>1 EA</u>	
Guide Shoe <u>Reg 5 1/2"</u>	<u>1 EA</u>	
Centralizers <u>S-4 5 1/2"</u>	<u>9 EA</u>	
Bottom Plug		
Top Plug <u>SW 5 1/2"</u>	<u>1 EA</u>	
Head		
Packer		
Other <u>Cmt. Baskets 5 1/2"</u>	<u>1 EA</u>	

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<u>J. Moore</u>	<u>38402</u>	
<u>B. G. S.</u>	<u>P.M.</u>	<u>Oberlin KS</u>
<u>J. Alstrom</u>	<u>0591</u>	
<u>66382</u>	<u>HT-400RCM</u>	<u>Oberlin KS</u>
<u>M. Jones</u>	<u>3846</u>	
<u>52046</u>	<u>24KTK</u>	<u>Oberlin KS</u>
<u>J. Keenan</u>	<u>4718</u>	
<u>63503</u>	<u>24KTK</u>	<u>Oberlin KS</u>

MATERIALS

TREAT. FLUID _____ DENSITY _____ LB/GAL. API _____
DISPL. FLUID _____ DENSITY _____ LB/GAL. API _____
PROP. TYPE _____ SIZE _____ LB _____
PROP. TYPE _____ SIZE _____ LB _____
ACID TYPE _____ GAL. _____ % _____
ACID TYPE _____ GAL. _____ % _____
ACID TYPE _____ GAL. _____ % _____
SURFACTANT TYPE _____ GAL. _____ IN _____
NE AGENT TYPE _____ GAL. _____ IN _____
FLUID LOSS ADD. TYPE _____ GAL.-LB. _____ IN _____
GELLING AGENT TYPE _____ GAL.-LB. _____ IN _____
FRIC. RED. AGENT TYPE _____ GAL.-LB. _____ IN _____
BREAKER TYPE _____ GAL.-LB. _____ IN _____
BLOCKING AGENT TYPE _____ GAL.-LB. _____ IN _____
PERFPAC BALLS TYPE _____ QTY. _____
OTHER _____
OTHER _____

DEPARTMENT Cmt.
DESCRIPTION OF JOB Cement Production Casing
JOB DONE THRU: TUBING CASING ANNULUS TBG./ANN.
CUSTOMER REPRESENTATIVE X Don Keene
HALLIBURTON OPERATOR Jack Moore COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK	MIXED LBS./GAL
	<u>375</u>	<u>HLC</u>			<u>4% Add Gel 1/4" Flocak</u>	<u>204</u>	<u>12.27</u>
	<u>90</u>	<u>EA-2</u>			<u>5% Cal Seal 10% Seal + .5% CIP-3</u>	<u>1143</u>	<u>13.09</u>
					<u>.25% D-Ar 10lbs Gilsenite</u>		

PRESSURES IN PSI
CIRCULATING _____ DISPLACEMENT _____
BREAKDOWN _____ MAXIMUM _____
AVERAGE _____ FRACTURE GRADIENT _____
SHUT-IN: INSTANT _____ 5-MIN _____ 15-MIN _____
HYDRAULIC HORSEPOWER _____
ORDERED _____ AVAILABLE _____ USED _____
AVERAGE RATES IN BPM _____
TREATING _____ DISPL _____ OVERALL _____
CEMENT LEFT IN PIPE _____
FEET 38 REASON Shoe Joint

SUMMARY
PRESLUSH: BBL.-GAL. _____ TYPE _____
LOAD & BKDN: BBL.-GAL. _____ PAD: BBL.-GAL. _____
TREATMENT: BBL.-GAL. _____ DISPL: BBL.-GAL. 82.6
CEMENT SLURRY: BBL.-GAL. 136 1/4 HLC 229 EA-2
TOTAL VOLUME: BBL.-GAL. _____
RAMARKS
See Job Log
Thank you

CUSTOMER: Petroleum Management Inc
LEASE: Mont Sol Unit
WELL NO: M-3
JOB TYPE: Cement Production Casing
DATE: 7-4-93

JOB LOG FORM 2013 R-3

 CUSTOMER: **P.M.I.** WELL NO: **M-3** LEASE: **Mont Sol** JOB TYPE: **Cmt. Prod. Csg** TICKET NO: **508226**

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1715							Called out - Ready @ 1930
	1920							On location - Rig laying down collars
	2050							Start Casing - 108 Jts used 14# Fr 5/2" Casing Reg. Guide shoe on bottom of 1st Joint Insert Float valve w/ Auto fill tube in top of shoe Joint 1 EA Cent. on 1st, 3rd, 5th, 7th, 9th, 60th, 62nd, 65th & 67th Cmt. Basket on 8th, 61st & 66th Jts
	2240							Finish casing - Hook up plug container
	2253							Rig Circulate - Pumped ball through insert @ 1000psi
	2335							Hook up to Howco
	2339		5 ntr					Start 5 bbl Fresh water
	2341							Start Cement - 375 sks HLC w/ 4% Add Gel + 1/4" Floccle
	0065		136 1/4 HLC					Finish HLC - Start 90 sks EA-2 w/ 5% Cal Seal, 10% Salt, 5% CFR3, 25% D-Air & 10# Gilonite
	0011		22.9 EA-2					Finish Cement - Shut down
	0011							Wash up Pump & lines
	0013	5 1/2						0 Release Plug & start disp
	0017	5 1/2	25				200	Caught Pressure
	0027	5	60				600	Cement Circulated ✓
	0032	5	81				900	Pressure & Rate
	0032	5	80 1/2				1150	Plug down - Holding
	0034							Release - Held
	0036							Wash up truck
	0105							Job Complete
								Circulated 22 bbl Cmt,

Phone 913-483-2627, Russell, Kansas
 Phone 316-793-5861, Great Bend, Kansas

Phone Plainville 913-434-2812
 Phone Ness City 913-798-3843

New

ALLIED CEMENTING CO., INC.

4123

Home Office P. O. Box 31 Russell, Kansas 67665

Date	6-30-93	Sec.	12	Fwp.	4	Range	19	Called Out	1:00 PM	On Location	4:30 PM	Job Start	8:00 PM	Finish	8:30 PM
Lease	Mont Sol	UNIT Well No.	M-3	Location	Speed 3 NIE 4 S	County	Phillips	State	Kansas						
Contractor	Murfin Drig	Rig	3												
Type Job	Surface														
Hole Size	12 1/4"	T.D.	211'												
Csg.	8 5/8"	Depth	211'												
Tbg. Size		Depth													
Drill Pipe		Depth													
Tool		Depth													
Cement Left in Csg.	15'	Shoe Joint													
Press Max.		Minimum													
Meas Line		Displace	✓												
Perf.															

Owner Same
 To Allied Cementing Co., Inc.
 You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Charge To Petroleum Management FMC.
 Street Box A
 City Plainville State Kansas
 The above was done to satisfaction and supervision of owner agent or contractor.

Purchase Order No.
 X Keith Van Pelt

CEMENT

Amount Ordered 135 SKS 60/40 po 23 20 cc 2 2 be 1
 Consisting of

Common	81 @ 5 75	465 75
Poz. Mix	54 @ 3 00	162 00
Gel.	2 @ N/C	N/C
Chloride	4 @ 25 00	100 00
Quickset		

EQUIPMENT

#177	No.	Cementor	M Kaufman
Pumptrk		Helper	Bill M
#218	No.	Cementor	
Pumptrk		Helper	
Bulktrk		Driver	Mike S.
Bulktrk		Driver	

Handling	@ 1 00 ea	135 00
Mileage	44 1/2 hr / mile	216 00
Sub Total		351 00
Total		1078 75

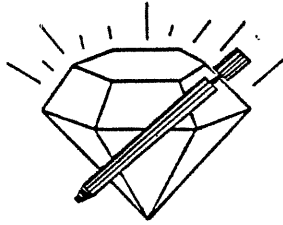
Floating Equipment

DEPTH of Job

Reference:	#	Pump Trk	430 00
		1-8 5/8" surface plug	42 00
		225 Per Mile	90 00
		Sub Total	
		Tax	
		Total	520 00

Remarks: Cement Did Circulate

Thanked



DIAMOND TESTING
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(316) 653-7550

Company Petroleum Management, Inc. Lease & Well No. Mont Sol Unit No. M-3
Elevation 1995 KB Formation Lansing/Kansas City (4. & 5 Zones) Effective Pay 6 Ft. Ticket No. 962
Date 7-3-93 Sec. 12 Twp. 4S Range 19W County Phillips State Kansas
Test Approved By Steve Davis Diamond Representative Roger D. Friedly

Formation Test No. 1 Interval Tested from 3,256 ft. to 3,294 ft. Total Depth 3,294 ft.
Packer Depth 3,251 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
Packer Depth 3,256 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3,244 ft. Recorder Number 13386 Cap. 3,875 psi
Bottom Recorder Depth (Outside) 3,291 ft. Recorder Number 13498 Cap. 3,925 psi
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____

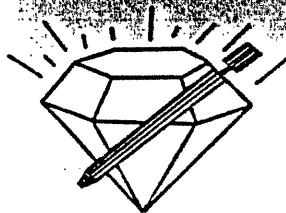
Drilling Contractor Murfin Drlg Co., Inc. - Rig 3 Drill Collar Length 348 ft. I.D. 2 1/2
Mud Type Chemical Viscosity 40 Weight Pipe Length 252 ft. I.D. 2 7/8
Weight 9.6 Water Loss 12.6 cc. Drill Pipe Length 2,629 ft. I.D. 3 1/2
Chlorides 2,000 P.P.M. Test Tool Length 27 ft. Tool Size 3 1/2-IF
Jars: Make Bowen Serial Number Not Run Anchor Length 38 ft. Size 4 1/2-FH
Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2-XH

Blow: 1st Open: Fair, 1 in., blow increasing to 9 ins. at end. No blow back during shut-in.
2nd Open: Weak, surface blow increasing to 10 ins. Weak blow back during shut-in.

Recovered 60 ft. of gas in pipe
Recovered 20 ft. of clean oil = .0984 bbls. (Gravity: 38° @ 60°)
Recovered 504 ft. of slightly oil cut muddy water = 3.02704 bbls. (Grind out: 5%-oil; 5%-mud; 90%-water)
Recovered 524 ft. of TOTAL FLUID = 3.12544 bbls.

Recovered _____ ft. of _____
Remarks _____

Time Set Packer(s) 3:30 ^{AXX} P.M. Time Started Off Bottom 6:30 ^{AXX} P.M. Maximum Temperature 114°
Initial Hydrostatic Pressure (A) 1600 P.S.I.
Initial Flow Period Minutes 15 (B) 89 P.S.I. to (C) 107 P.S.I.
Initial Closed In Period Minutes 30 (D) 1095 P.S.I.
Final Flow Period Minutes 45 (E) 177 P.S.I. to (F) 245 P.S.I.
Final Closed In Period Minutes 90 (G) 1095 P.S.I.
Final Hydrostatic Pressure (H) 1593 P.S.I.



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FLUID SAMPLE DATA

Company Petroleum Management, Inc.
 Lease & Well No. Mont Sol Unit No. M-3
 Date 7-3-93 Sec. 12 Twp. 4 S Range 19 W
 Formation Test No. 1 Interval Tested From 3,256 ft. to 3,294 ft. Total Depth 3,294 ft.
 Formation Lansing/Kansas City (4 & 5 Zones)

	<u>MUD PIT</u>	<u>RECOVERY</u>	
Viscosity	<u>40</u> CP	<u>--</u> CP	
Weight	<u>9.6</u>	<u>--</u>	
Water Loss	<u>12.6</u> CC	<u>--</u> CC	<u>WATER</u>
PH Factor	<u>11.5</u>	<u>--</u>	<u>7.0</u>

	<u>RESISTIVITY</u>			<u>CHLORIDE CONTENT</u>	
Recovery Water	<u>.12</u>	@	<u>86</u> °F.	<u>50,000</u>	ppm
Recovery Mud	<u>--</u>	@	<u>--</u> °F.	<u>--</u>	ppm
Recovery Mud Filtrate	<u>--</u>	@	<u>--</u> °F.	<u>--</u>	ppm
Mud Pit Sample	<u>.86</u>	@	<u>96</u> °F.	<u>5,000</u>	ppm
Mud Pit Sample Filtrate	<u>1.1</u>	@	<u>99</u> °F.	<u>4,000</u>	ppm

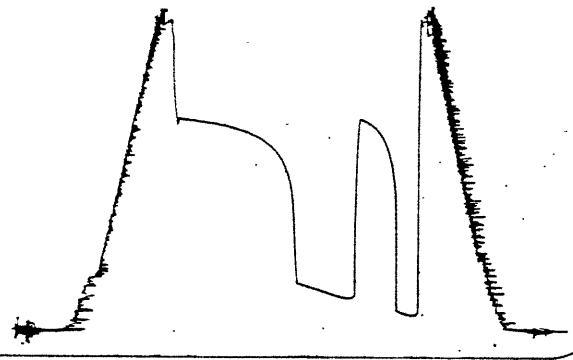
Sample Taken By Roger D. Friedly

Witness By Steve Davis

Remarks Filtrate tritition dish chlorides were 2,000 Ppm.

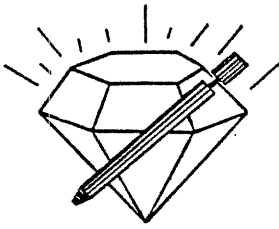
Recovery water tritition dish chlorides were 42,000 Ppm.

DST# T Outside 13498 3256-3294
 Clock 33709 LCC 4 93 LOC 3291



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	1600	1600	PSI
(B) First Initial Flow Pressure.....	89	97	PSI
(C) First Final Flow Pressure	107	109	PSI
(D) Initial Closed-in Pressure	1095	1103	PSI
(E) Second Initial Flow Pressure.....	177	186	PSI
(F) Second Final Flow Pressure.....	245	242	PSI
(G) Final Closed-in Pressure.....	1095	1099	PSI
(H) Final Hydrostatic Mud.....	1593	1593	PSI



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Company Petroleum Management, Inc. Lease & Well No. Mont Sol Unit No. M-3
Elevation 1995 KB Formation Lansing/Kansas City (5 Zone) Effective Pay 3 Ft. Ticket No. 963
Date 7-4-93 Sec. 12 Twp. 4S Range 19W County Phillips State Kansas
Test Approved By Steve Davis Diamond Representative Roger D. Friedly

Formation Test No. 2 Interval Tested from 3,274 ft. to 3,294 ft. Total Depth 3,294 ft.
Packer Depth 3,269 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
Packer Depth 3,274 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) _____ 3,262 ft. Recorder Number 13386 Cap. 3,875 psi
Bottom Recorder Depth (Outside) _____ 3,291 ft. Recorder Number 13498 Cap. 3,925 psi
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____

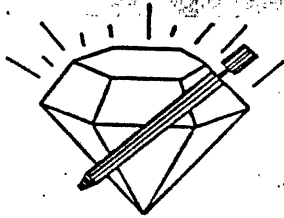
Drilling Contractor Murfin Drilg Co., Inc. - Rig 3 Drill Collar Length 348 ft. I.D. _____ 2 1/2 in.
Mud Type Chemical Viscosity 38 Weight Pipe Length 252 ft. I.D. _____ 2 7/8 in.
Weight 9.15 Water Loss 15.9 cc. Drill Pipe Length 2,647 ft. I.D. _____ 3 1/2 in.
Chlorides 2,500 P.P.M. Test Tool Length 27 ft. Tool Size 3 1/2 -IF in.
Jars: Make Bowen Serial Number Not Run Anchor Length 20 ft. Size 4 1/2 -FH in.
Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 -XH in.

Blow: 1st Open: Weak, 1/8 in., blow slowly increasing to 2 ins.
2nd Open: No blow for 6 mins. Weak surface blow increasing to 1/2 in.

Recovered 1 ft. of clean oil = .00492 bbls.
Recovered 79 ft. of slightly oil cut muddy water = .38868 bbls. (Grind out: 5%-oil; 50%-mud; 45%-water)
Recovered 80 ft. of TOTAL FLUID = .3936 bbls.
Recovered _____ ft. of _____
Recovered _____ ft. of _____

Remarks _____

Time Set Packer(s)	<u>2:45</u>	<u>A.M.</u>	Time Started Off Bottom	<u>4:45</u>	<u>P.M.</u>	Maximum Temperature	<u>112°</u>
Initial Hydrostatic Pressure			(A)	<u>1573</u>	P.S.I.		
Initial Flow Period	Minutes	<u>30</u>	(B)	<u>68</u>	P.S.I. to (C)	<u>49</u>	P.S.I.
Initial Closed In Period	Minutes	<u>30</u>	(D)	<u>890</u>	P.S.I.		
Final Flow Period	Minutes	<u>30</u>	(E)	<u>97</u>	P.S.I. to (F)	<u>78</u>	P.S.I.
Final Closed In Period	Minutes	<u>30</u>	(G)	<u>820</u>	P.S.I.		
Final Hydrostatic Pressure			(H)	<u>1573</u>	P.S.I.		



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FLUID SAMPLE DATA

Company Petroleum Management, Inc.
Lease & Well No. Mont Sol Unit No. M-3
Date 7-4-93 Sec. 12 Twp. 4 S Range 19 W
Formation Test No. 2 Interval Tested From 3,274 ft. to 3,294 ft. Total Depth 3,294 ft.
Formation Lansing/Kansas City (5 Zone)

	<u>MUD PIT</u>	<u>RECOVERY</u>
Viscosity	<u>38</u> CP	<u>60+</u> CP
Weight	<u>9.15</u>	<u>9.0</u>
Water Loss	<u>15.9</u> CC	<u>23.2</u> CC
PH Factor	<u>10.5</u>	<u>9.5</u>

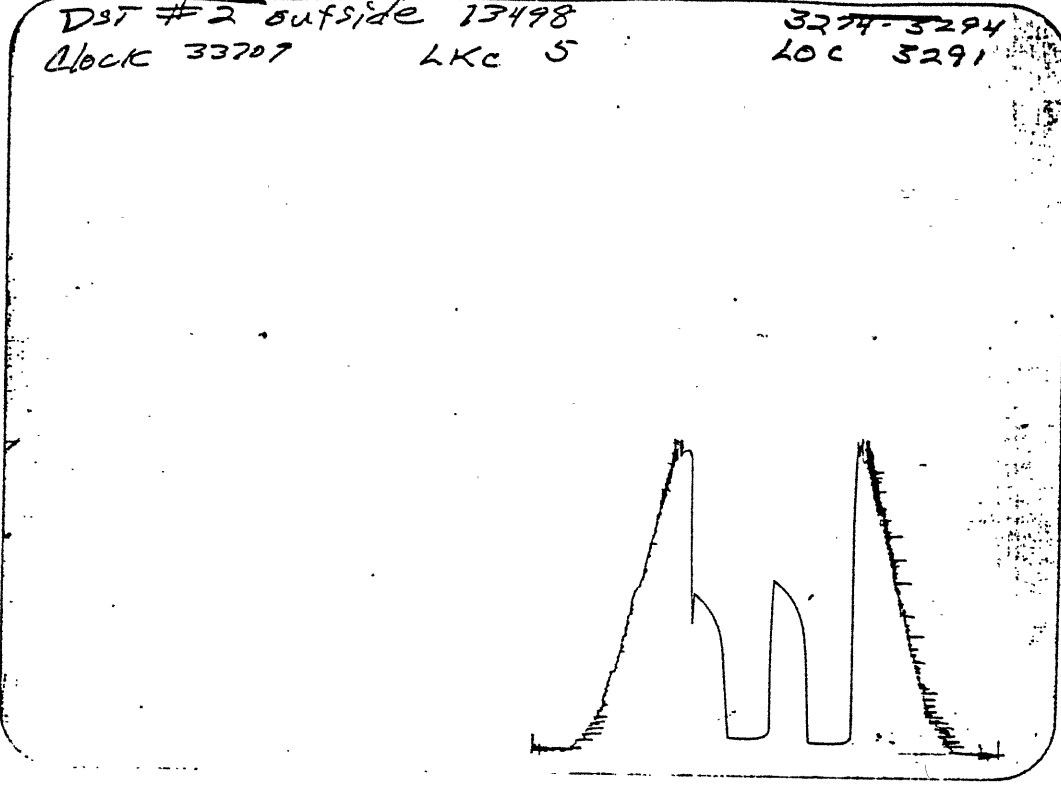
	<u>RESISTIVITY</u>	<u>CHLORIDE CONTENT</u>
Recovery Water	<u>.50 @ 82 °F.</u>	<u>10,000 ppm</u>
Recovery Mud	<u>.60 @ 82 °F.</u>	<u>8,000 ppm</u>
Recovery Mud Filtrate	<u>.54 @ 84 °F.</u>	<u>10,000 ppm</u>
Mud Pit Sample	<u>1.0 @ 72 °F.</u>	<u>6,000 ppm</u>
Mud Pit Sample Filtrate	<u>1.1 @ 78 °F.</u>	<u>5,000 ppm</u>

Sample Taken By Roger D. Friedly

Witness By Steve Davis

Remarks Filtrate tritition dish chlorides were 2,500 Ppm.

Recovery filtrate tritition dish chlorides were 8,500 Ppm.



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	Field Reading	Office Reading	
(A) Initial Hydrostatic Mud	1573	1573	PSI
(B) First Initial Flow Pressure.....	68	80	PSI
(C) First Final Flow Pressure	49	51	PSI
(D) Initial Closed-in Pressure	890	906	PSI
(E) Second Initial Flow Pressure.....	97	101	PSI
(F) Second Final Flow Pressure.....	78	76	PSI
(G) Final Closed-in Pressure.....	820	821	PSI
(H) Final Hydrostatic Mud.....	1573	1573	PSI