

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

Operator: License # 8759
Name Mack Energy Co.
Address P.O. Box 400
City/State/Zip Duncan, OK 73534

Purchaser Permian Oil Corp.

Operator Contact Person O.D. Mellott
Phone 1-405-233-6230

Contractor: License # 5146
Name Rains & Williamson Oil Co., Inc.

Wellsite Geologist Casey Galloway
Phone 1-317-267-7355

Designate Type of Completion
 New Well Re-Entry Workover
 Oil SWD Temp Abd
 Gas Inj Delayed Comp.
 Dry Other (Core, Water Supply etc.)

If ONWO: old well info as follows:
Operator
Well Name
Comp. Date Old Total Depth

WELL HISTORY

Drilling Method:
 Mud Rotary Air Rotary Cable
6-15-88 6-22-88 7-15-88
Spud Date Date Reached TD Completion Date
4475' 4420'
Total Depth PBTD

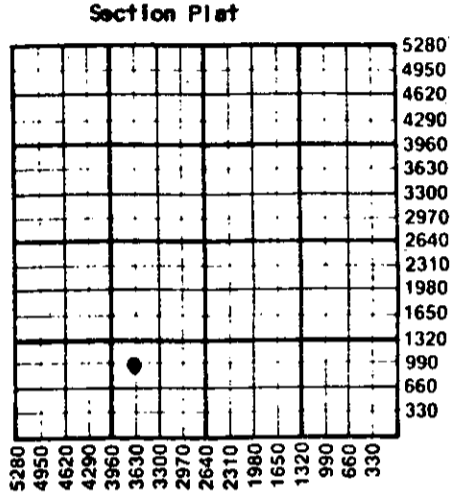
Amount of Surface Pipe Set and Cemented at 229' feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set 825' feet
If alternate 2 completion, cement circulated from 0' feet depth to 825' w/ 175' SX cmt
Cement Company Name Wallis
Invoice # 620297
9-12-88

API NO. 15-135-23252-0006
County Ness
NW.. SE.. SW.. Sec. 31.. Twp. 17S.. Rge. 23.. East West

990' Ft North from Southeast Corner of Section
3630' Ft West from Southeast Corner of Section
(Note: Locate well in section plat below)

Lease Name LULA Well # 3
Field Name Pfannenstiel Miner
Producing Formation Cherokee Sand

Elevation: Ground 2387 GL 2396 KB



WATER SUPPLY INFORMATION
Disposition of Produced Water: Disposal
Docket # Repressuring

Questions on this portion of the ACO-1 call:
Water Resources Board (913) 296-3717
Source of Water:
Division of Water Resources Permit #
Groundwater.....Ft North from Southeast Corner (Well)Ft West from Southeast Corner of Sec Twp Rge East West
 Surface Water.....Ft North from Southeast Corner (Stream, pond etc).....Ft West from Southeast Corner Sec Twp Rge East West
Drilling contractor purchased water from Steve Potter, Box 12, Arnold, KS.
Other (explain).....
(purchased from city, R.W.D. #)

INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date of any well. Rule 82-3-130, 82-3-107 and 82-3-106 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 confidential excess of 12 months. One copy of all wireline logs and drillers time log shall be attached with this form. 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 Gordon E. Demmon
Title V.P. Production Date 7-19-88
Subscribed and sworn to before me this 19th day of July 1988.
Notary Public Emory Lee Stucky II
Date Commission Expires 8-16-89

K.C.C. OFFICE USE ONLY
F Letter of Confidentiality Attached
C Wireline Log Received
C Drillers Timelog Received
Distribution
 KCC SWD/Rep NGPA
 KGS Plug Other (Specify)
7-27-88
Form ACO-1 (5-86)

Sec. 31, Twp. 17S, Rge. 23W

SIDE TWO

Operator Name Mack Energy Co. Lease Name LULA Well # 3

Sec. 31 Twp. 17S Rge. 23 East West County Ness

WELL LOG

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 <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Formation Description <input checked="" type="checkbox"/> Log <input type="checkbox"/> Sample
Samples Sent to Geological Survey <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

DST #1; 4360'-4404' (Cherokee Sand)	Heebner	3762 - 3768
IH 2203	Lansing	3800 - 4072
IFP 269-282 (15 Min.)	Pawnee	4208 - 4291
ISIP 1263 (30 Min.)	Ft. Scott	4294 - 4318
FFP 338-578 (60 Min.)	Cherokee Sh.	4318 - 4320
FSIP 1214 (60 Min.)	Cherokee Sd.	4366 - 4433
FH 2185	Miss.	4433 - T.D.
BHT 125°	LTD	4474'
Rec. 90' GIP + 1530' Gassy Oil	DTD	4475'

CASING RECORD <input type="checkbox"/> New <input 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"	20#	229'	50-50 poz	150	2% gel, 3% cc.
Production	7 7/8"	4 1/2"	10 1/2#	4473'	50-50 poz	25	2% gel
					50-50 poz	125	2% gel, 10% salt 3/4 of 1% CFB-3 10% gilsonite
PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record			
Shots Per Foot	Specify Footage of Each Interval Perforated			(Amount and Kind of Material Used)		Depth	
2/ft	4372-4392'			None		400 gal. Super Flus K	
TUBING RECORD				Liner Run	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Size	Set At	Packer at					
2 3/8"	4437'	None					
Date of First Production	Producing Method						
7-6-88	<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	Gas	Water	Gas-Oil Ratio	Gravity		
	170	TSTM	0	0	41°		
	Bbls	MCF	Bbls	CFPB			

METHOD OF COMPLETION

Disposition of gas: Vented Open Hole Perforation
 Sold Other (Specify)
 Used on Lease Dually Completed Commingled

Production Interval: 4372-4392'

**WORK ORDER CONTRACT
AND PRE-TREATMENT DATA**

ATTACH TO INVOICE & TICKET NO. 620297

FORM 1908 R-5

DISTRICT Hays, Ks

DATE 8-9-88

TO: **HALLIBURTON SERVICES** YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICEMEN TO DELIVER AND OPERATE

THE SAME AS AN INDEPENDENT CONTRACTOR TO: Mack Energy Co (CUSTOMER)

AND DELIVER AND SELL PRODUCTS, SUPPLIES, AND MATERIALS FOR THE PURPOSE OF SERVICING

WELL NO. #3 LEASE hula SEC. 31 TWP. 17 RANGE 23

FIELD _____ COUNTY Ness STATE Ks OWNED BY same

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME	TYPE	NEW USED	WEIGHT	SIZE	FROM	TO	MAX. ALLOW. P.S.I.
FORMATION THICKNESS	FROM						
PACKER: TYPE	<u>RBP</u>						
TOTAL DEPTH	<u>4475</u>						
BORE HOLE							SHOTS/FT.
INITIAL PROD:	OIL _____ BPD, H ₂ O _____ BPD, GAS _____						
PRESENT PROD:	OIL _____ BPD, H ₂ O _____ BPD, GAS _____						
CASING		<u>w</u>	<u>10.5</u>	<u>4 1/2</u>	<u>6L</u>	<u>4475</u>	
LINER							
TUBING		<u>w</u>	<u>2 3/8</u>	<u>2 3/8</u>	<u>6L</u>	<u>829</u>	
PERFORATIONS							
PERFORATIONS							
PERFORATIONS							

PREVIOUS TREATMENT: DATE _____ TYPE _____ MATERIALS _____

TREATMENT INSTRUCTIONS: TREAT THRU TUBING ANNULUS CASING TUBING/ANNULUS HYDRAULIC HORSEPOWER ORDERED

cut thru F.O. tool w/ 150 lbs of HLC w/ 4 # Floccle & 25 sks HLC w/ 22 cc & 4 # Floccle

CUSTOMER OR HIS AGENT WARRANTS THE WELL IS IN PROPER CONDITION TO RECEIVE THE PRODUCTS, SUPPLIES, MATERIALS, AND SERVICES

THIS CONTRACT MUST BE SIGNED BEFORE WORK IS COMMENCED

- As consideration, the above-named Customer agrees:
- (a) To pay Halliburton in accord with the rates and terms stated in Halliburton's current price lists.
 - (b) Halliburton shall not be responsible for and Customer shall secure Halliburton against any liability for damage to property of Customer and of the well owner (if different from Customer), unless caused by the willful misconduct or gross negligence of Halliburton, this provision applying to but not limited to subsurface damage and surface damage arising from subsurface damage.
 - (c) Customer shall be responsible for and secure Halliburton against any liability for reservoir loss or damage, or property damage resulting from subsurface pressure, losing control of the well and/or a well blowout, unless such loss or damage is caused by the willful misconduct or gross negligence of Halliburton.
 - (d) Customer shall be responsible for and secure Halliburton against any and all liability of whatsoever nature for damages as a result of subsurface trespass, or an action in the nature thereof, arising from a service operation performed by Halliburton hereunder.
 - (e) Customer shall be responsible for and secure Halliburton against any liability for injury to or death of persons, other than employees of Halliburton, or damage to property (including, but not limited to, injury to the well), or any damages whatsoever, irrespective of cause, growing out of or in any way connected with the use of radioactive material in the well hole, unless such damage shall be caused by the willful misconduct or gross negligence of Halliburton.
 - (f) Halliburton makes no guarantee of the effectiveness of the products, supplies or materials, nor of the results of any treatment or service.
 - (g) Customer shall, at its risk and expense, attempt to recover any Halliburton equipment, tools or instruments which are lost in the well and if such equipment, tools or instruments are not recovered, Customer shall pay Halliburton its replacement cost unless such loss is due to the sole negligence of Halliburton. If Halliburton equipment, tools or instruments are damaged in the well, Customer shall pay Halliburton the lesser of its replacement cost or the cost of repairs unless such damage is caused by the sole negligence of Halliburton. In the case of equipment, tools or instruments for marine operations, Customer shall, in addition to the foregoing, be fully responsible for loss of or damage to any of Halliburton's equipment, tools or instruments which occurs at any time after delivery to Customer at the landing until returned to the landing, unless such loss or damage is caused by the sole negligence of Halliburton.
 - (h) Because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, Halliburton is unable to guarantee the accuracy of any chart interpretation, research analysis, job recommendation or other data furnished by Halliburton. Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton shall not be responsible for any damages arising from the use of such information except where due to Halliburton's gross negligence or willful misconduct in the preparation or furnishing of it.
 - (i) Halliburton warrants only title to the products, supplies and materials and that the same are free from defects in workmanship and materials. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE WHICH EXTEND BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale or use of any products, supplies or materials is expressly limited to the replacement of such products, supplies or materials on their return to Halliburton or, at Halliburton's option, to the allowance to the Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, punitive or consequential damages.
 - (j) Invoices payable NET by the 20th of the following month after date of invoice. Upon Customer's default in payment of Customer's account by the last day of the month following the month in which the invoice is dated, Customer agrees to pay interest thereon after default at the highest lawful contract rate applicable but never to exceed 18% per annum. In the event it becomes necessary to employ an attorney to enforce collection of said account, Customer agrees to pay all collection costs and attorney fees in the amount of 20% of the amount of the unpaid account.
 - (k) This contract shall be governed by the law of the state where services are performed or equipment or materials are furnished.
 - (l) Halliburton shall not be bound by any changes or modifications in this contract, except where such change or modification is made in writing by a duly authorized executive officer of Halliburton.

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT.

SIGNED O.D. Meltzer CUSTOMER
DATE 8-9-88
TIME 9:00 A.M. P.M.

We certify that the Fair Labor Standards Act of 1938, as amended, has been complied with in the production of goods and/or with respect to services furnished under this contract.

CUSTOMER

CUSTOMER: *Mact Energy Co*
PLEASE: *Lulu*
WELL NO.: *#3*
JOB TYPE: *Cut thru F.O.*
DATE: *8-9-88*

WELL DATA

FIELD _____ SEC. 31 TWP. 17 RNG. 23 COUNTY Ness STATE Ks

FORMATION NAME	TYPE	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING		<u>u</u>	<u>10.5</u>	<u>4 1/2</u>	<u>62</u>	<u>4175</u>	
LINER							
TUBING		<u>u</u>		<u>2 3/8</u>	<u>62</u>	<u>829</u>	
OPEN HOLE							SHOTS/FT.
PERFORATIONS							
PERFORATIONS							
PERFORATIONS							

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 RBP SET AT 961

BOTTOM HOLE TEMP. _____ PRESSURE _____

MISC. DATA _____ TOTAL DEPTH 4475

JOB DATA

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>8-9-88</u>	DATE <u>8-9-88</u>	DATE <u>8-9-88</u>	DATE <u>8-9-88</u>
TIME <u>07:00</u>	TIME <u>09:00</u>	TIME <u>09:00</u>	TIME <u>13:00</u>

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE		
GUIDE SHOE		
CENTRALIZERS		
BOTTOM PLUG		
TOP PLUG		
HEAD		
PACKER <u>RBP</u> <u>4 1/2</u> <u>1</u>		<u>Kawco</u>
OTHER		

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<u>F. Fuchs</u>	<u>3580</u>	<u>Ness City, Ks</u>
<u>B. Crosswhite</u>	<u>Combo</u>	<u>Ness City, Ks</u>
<u>O. Maghee</u>	<u>0218</u>	<u>Hays, 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 _____

ACID TYPE _____

ACID TYPE _____

SURFACTANT TYPE _____ GAL. _____ IN _____

NE AGENT TYPE _____ GAL. _____ IN _____

FLUID LOSS ADD. TYPE _____ GAL.-LB. _____

GELLING AGENT TYPE _____ GAL.-LB. _____ IN _____

FRIC. RED. AGENT TYPE _____ GAL.-LB. _____ IN _____

BREAKER TYPE _____ GAL.-LB. _____ IN _____

BLOCKING AGENT TYPE _____ GAL.-LB. _____

PERFPAC BALLS TYPE _____ QTY. _____

OTHER _____

OTHER _____

RECEIVED
STATE CORPORATION COMMISSION
SEP - 6 1988
CONSERVATION DIVISION
Wichita, Kansas

DEPARTMENT Cut

DESCRIPTION OF JOB Cut thru F.O. collar

JOB DONE THRU: TUBING CASING ANNULUS TSG./ANN.

CUSTOMER REPRESENTATIVE X OR by [Signature]

HALLIBURTON OPERATOR [Signature] COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	TYPE	API CLASS	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
<u>1</u>	<u>150</u>	<u>HLA</u>	<u>A</u>	<u>Premix B</u>	<u>4 # Flocrete</u>		<u>1.84</u>	<u>12.7</u>
	<u>25</u>	<u>HLA</u>	<u>A</u>	<u>Premix B</u>	<u>4 # Flocrete</u>	<u>220cc</u>	<u>1.84</u>	<u>12.7</u>

PRESSURES IN PSI			SUMMARY			VOLUMES		
CIRCULATING _____	DISPLACEMENT _____	PRESLUSH: BBL.-GAL. _____	TYPE _____	LOAD & BKDN: BBL.-GAL. _____	PAD: BBL.-GAL. _____	TREATMENT: BBL.-GAL. _____	DISPL: BBL.-GAL. <u>3</u>	
BREAKDOWN _____	MAXIMUM _____	CEMENT SLURRY: BBL.-GAL. <u>15</u>		TOTAL VOLUME: BBL.-GAL. _____				
AVERAGE _____	FRACTURE GRADIENT _____	REMARKS						
SHUT-IN: INSTANT _____	5-MIN. _____							
HYDRAULIC HORSEPOWER								
ORDERED _____	AVAILABLE _____							
AVERAGE RATES IN BPM								
TREATING _____	DISPL. _____							
CEMENT LEFT IN PIPE								
FEET _____	REASON _____							

JOB LOG

WELL NO. #3 LEASE Lulu TICKET NO. 620297
 CUSTOMER Mack Energy Co PAGE NO. #1
 JOB TYPE Cnt Thru F.O. tool DATE 8-9-88

FORM 2013 R-2

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
1	07:00							Called out
	09:00							On location / set up /
	09:55	3	16					of sand hole
	10:03					900	900	Test plug to 900PSI
	10:05					900	900	Holding
	10:10							Spot sand
	10:20							Let sand settle
	10:35							opened F.O. at 829 ft
	10:43	3	6					Took injection rate 3 BPM at 400PSI
	10:49							Started mixing cut 175 sks
	11:07	3	57			400	400	Done mixing cut (cut circ.)
	11:08							Started displ
	11:09	1.5	3					Done w/ displ
	11:10							Closed F.O. tool (30 sks cut circ.)
	11:11					800	800	Pressured up on casing to 800PSI
	11:13					800	800	Holding
	11:13	3	6			300	300	Reversed out
	11:20							Pulled Positioner out of hole
	11:55							Run over shot for plug
	12:25							Worked sand off plug
	12:35							Job completed
	12:45							Rocked up tool
	13:00							Shut down
								<i>[Signature]</i>

RECEIVED
 STATE OPERATOR COMMISSION
 SEP - 6 1988
 CONSERVATION DIVISION
 Wichita, Kansas

T. Fuchs = B1493
 B. Crosswhite = 89543
 D. Magehee = 41335



BULK MATERIALS DELIVERY AND TICKET CONTINUATION

FOR INVOICE AND
TICKET NO. 620297

DATE 8-9-88	CUSTOMER ORDER NO.	WELL NO. AND FARM Lulu #3	COUNTY Ness	STATE Kansas
CHARGE TO Mack Energies		OWNER Same	CONTRACTOR No. B 655045	
MAILING ADDRESS		DELIVERED FROM Hays, Ks	LOCATION CODE 50325	PREPARED BY Kuhn
CITY & STATE		DELIVERED TO n/W Ness City, Ks	TRUCK NO. 0818	RECEIVED BY <i>[Signature]</i>

PRICE REFERENCE	SECONDARY REF. OR PART NO.	CODE		DESCRIPTION	UNITS 1		UNITS 2		UNIT PRICE	AMOUNT		
		L	D		QTY.	MEAS.	QTY.	MEAS.				
504-118		2	B	Halliburton Light Cement	175				4.92	861	00	
509-406	890.50812	2	B	Calcium Chloride Blended	1				25.75	25	75	
507-210	890.50071	2	B	Flocele Blended	44	lb			1.21	53	24	
<p style="font-size: 2em; opacity: 0.5; transform: rotate(-30deg);">THIS IS NOT AN INVOICE</p> <p style="font-size: 1.5em; opacity: 0.5; transform: rotate(-30deg);">RECEIVED STATE CORPORATION COMMISSION SEP - 6 1988 CONSERVATION DIVISION Wichita, Kansas</p>												
				Returned Mileage Charge			TOTAL WEIGHT	LOADED MILES	TON MILES			
				SERVICE CHARGE ON MATERIALS RETURNED					CU. FEET			
500-207		2	B	SERVICE CHARGE				177	.95	168	15	
500-322		2	B	Mileage Charge	16,259		6	48,777	Min	45	00	
No. B 655045							CARRY FORWARD TO INVOICE			SUB-TOTAL	1,153	14

CUSTOMER



FORM 1906 R-11

WELL NO. - FARM OR LEASE NAME <u>#3 L.H.</u>		COUNTY <u>Ness</u>	STATE <u>Ks</u>	CITY / OFFSHORE LOCATION	DATE <u>8-9-88</u>
CHARGE TO <u>Mack Energy Co.</u>		OWNER <u>Same</u>		TICKET TYPE (CHECK ONE) SERVICE <input checked="" type="checkbox"/> SALES <input type="checkbox"/>	
ADDRESS <u>P.O. Box 900</u>		CONTRACTOR <u>Mays Well Service</u>		LOCATION <u>1 Ness City, Ks 50353</u>	
CITY, STATE, ZIP <u>Duncan, Ok.</u>		SHIPPED VIA <u>Ness City, Ks</u>		LOCATION <u>2</u>	
WELL TYPE <u>01</u>		WELL CATEGORY <u>02</u>		WELL PERMIT NO.	
TYPE AND PURPOSE OF JOB <u>195</u>		B-		ORDER NO.	
				REFERRAL LOCATION	
				LOCATION <u>3</u>	
				CODE	

As consideration, the above-named Customer agrees to pay Halliburton in accord with the rates and terms stated in Halliburton's current price lists. Invoices payable NET by the 20th of the following month after date of invoice. Upon Customer's default in payment of Customer's account by the last day of the month following the month in which the invoice is dated, Customer agrees to pay interest thereon after default at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event it becomes necessary to employ an attorney to enforce collection of said account, Customer agrees to pay all collection costs and attorney fees in the amount of 20% of the amount of the unpaid account. These terms and conditions shall be governed by the law of the state where services are performed or equipment or materials are furnished.

Halliburton warrants only title to the products, supplies and materials and that the same are free from defects in workmanship and materials. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE WHICH EXTEND BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's liability and customer's exclusive remedy in any cause of action (whether in contract, tort, product liability, breach of warranty or otherwise) arising out of the sale or use of any products, supplies or materials is expressly limited to the replacement of such products, supplies or materials on their return to Halliburton or, at Halliburton's option, to the allowance to the customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, punitive or consequential damages.

PRICE REFERENCE	SECONDARY REF OR PART NO.	L O C.	ACCOUNT	DESCRIPTION	UNITS 1		UNITS 2		UNIT PRICE	AMOUNT
					QTY	MEAS	QTY	MEAS		
100-115		1		MILEAGE 34926	6	mi			80	400
116-436		1		F.O. Positioners	1	ea	4 1/2	in	155	155.00
110-007		1		RBP	956	ea	1/2		900	980.00
116-228		1		Stripper head	1	ea			130	130.00
510-222		1		True Sand 20 Ho Body	1	ea			7.95	7.95

THIS IS NOT AN INVOICE

RECEIVED
STATE CORPORATION COMMISSION
SEP - 6 1988
CONSERVATION DIVISION
Wichita, Kansas

AS PER ATTACHED BULK MATERIAL DELIVERY TICKET NO. **B-**

WAS JOB SATISFACTORILY COMPLETED? _____

WAS OPERATION OF EQUIPMENT SATISFACTORY? _____

WAS PERFORMANCE OF PERSONNEL SATISFACTORY? _____

X O.D. Mellott
CUSTOMER OR HIS AGENT (PLEASE PRINT)

X [Signature]
CUSTOMER OR HIS AGENT (SIGNATURE)

WE CERTIFY THAT THE FAIR LABOR STANDARDS ACT OF 1938, AS AMENDED HAS BEEN COMPLIED WITH IN THE PRODUCTION OF GOODS AND OR WITH RESPECT TO SERVICES FURNISHED UNDER THIS CONTRACT.

[Signature]
HALLIBURTON OPERATOR

HALLIBURTON APPROVAL _____
CUSTOMER

SUB TOTAL

APPLICABLE TAXES WILL BE ADDED ON INVOICE.



HALLIBURTON SERVICES

Duncan, Oklahoma 73536

A Halliburton Company

FORM 1908 R-5

WORK ORDER CONTRACT AND PRE-TREATMENT DATA

ATTACH TO INVOICE & TICKET NO. 620296

DISTRICT Hugs, Ks

DATE 8-9-88

TO: HALLIBURTON SERVICES YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICEMEN TO DELIVER AND OPERATE THE SAME AS AN INDEPENDENT CONTRACTOR TO: Mack Energy Co (CUSTOMER) AND DELIVER AND SELL PRODUCTS, SUPPLIES, AND MATERIALS FOR THE PURPOSE OF SERVICING

WELL NO. #3 LEASE Lula SEC. 31 TWP. 17^s RANGE 23^w

FIELD _____ COUNTY Ness STATE Ks OWNED BY same

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME	TYPE	NEW USED	WEIGHT	SIZE	FROM	TO	MAX. ALLOW. P.S.I.
FORMATION THICKNESS	FROM TO						
PACKER: TYPE	SET AT						
TOTAL DEPTH	MUD WEIGHT						
BORE HOLE							SHOTS/FT.
INITIAL PROD: OIL BPD, H ₂ O BPD, GAS MCF							
PRESENT PROD: OIL BPD, H ₂ O BPD, GAS MCF							
PERFORATIONS							
PERFORATIONS							
PERFORATIONS							

PREVIOUS TREATMENT: DATE _____ TYPE _____ MATERIALS _____

TREATMENT INSTRUCTIONS: TREAT THRU TUBING ANNULUS CASING TUBING/ANNULUS HYDRAULIC HORSEPOWER ORDERED _____

Run RBP & F.O. Positioners to 961 ft. M.O. at 829 ft

CUSTOMER OR HIS AGENT WARRANTS THE WELL IS IN PROPER CONDITION TO RECEIVE THE PRODUCTS, SUPPLIES, MATERIALS, AND SERVICES

THIS CONTRACT MUST BE SIGNED BEFORE WORK IS COMMENCED

As consideration, the above-named Customer agrees:

- (a) To pay Halliburton in accord with the rates and terms stated in Halliburton's current price lists.
- (b) Halliburton shall not be responsible for and Customer shall secure Halliburton against any liability for damage to property of Customer and of the well owner (if different from Customer), unless caused by the willful misconduct or gross negligence of Halliburton, this provision applying to but not limited to subsurface damage and surface damage arising from subsurface damage.
- (c) Customer shall be responsible for and secure Halliburton against any liability for reservoir loss or damage, or property damage resulting from subsurface pressure, losing control of the well and/or a well blowout, unless such loss or damage is caused by the willful misconduct or gross negligence of Halliburton.
- (d) Customer shall be responsible for and secure Halliburton against any and all liability of whatsoever nature for damages as a result of subsurface trespass, or an action in the nature thereof, arising from a service operation performed by Halliburton hereunder.
- (e) Customer shall be responsible for and secure Halliburton against any liability for injury to or death of persons, other than employees of Halliburton, or damage to property (including, but not limited to, injury to the well), or any damages whatsoever, irrespective of cause, arising out of or in any way connected with the use of radioactive material in the well hole, unless such damage shall be caused by the willful misconduct or gross negligence of Halliburton.
- (f) Halliburton makes no guarantee of the effectiveness of the products, supplies or materials, nor of the results of any treatment or service.
- (g) Customer shall, at its risk and expense, attempt to recover any Halliburton equipment, tools or instruments which are lost in the well and if such equipment, tools or instruments are not recovered, Customer shall pay Halliburton its replacement cost unless such loss is due to the sole negligence of Halliburton. If Halliburton equipment, tools or instruments are damaged in the well, Customer shall pay Halliburton the lesser of its replacement cost or the cost of repairs unless such damage is caused by the sole negligence of Halliburton. In the case of equipment, tools or instruments for marine operations, Customer shall, in addition to the foregoing, be fully responsible for loss of or damage to any of Halliburton's equipment, tools or instruments which occurs at any time after delivery to Customer at the landing until returned to the landing, unless such loss or damage is caused by the sole negligence of Halliburton.
- (h) Because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, Halliburton is unable to guarantee the accuracy of any chart interpretation, research analysis, job recommendation or other data furnished by Halliburton. Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton shall not be responsible for any damages arising from the use of such information except where due to Halliburton's gross negligence or willful misconduct in the preparation or furnishing of it.
- (i) Halliburton warrants only title to the products, supplies and materials and that the same are free from defects in workmanship and materials. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE WHICH EXTEND BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale or use of any products, supplies or materials is expressly limited to the replacement of such products, supplies or materials on their return to Halliburton or, at Halliburton's option, to the allowance to the Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, punitive or consequential damages.
- (j) Invoices payable NET by the 20th of the following month after date of invoice. Upon Customer's default in payment of Customer's account by the last day of the month following the month in which the invoice is dated, Customer agrees to pay interest thereon after default at the highest lawful contract rate applicable but never to exceed 18% per annum. In the event it becomes necessary to employ an attorney to enforce collection of said account, Customer agrees to pay all collection costs and attorney fees in the amount of 20% of the amount of the unpaid account.
- (k) This contract shall be governed by the law of the state where services are performed or equipment or materials are furnished.
- (l) Halliburton shall not be bound by any changes or modifications in this contract, except where such change or modification is made in writing by a duly authorized executive officer of Halliburton.

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT.

SIGNED [Signature] CUSTOMER

DATE 8-9-88

TIME 08:00 A.M. P.M.

We certify that the Fair Labor Standards Act of 1938, as amended, has been complied with in the production of goods and/or with respect to services furnished under this contract.

CUSTOMER

CUSTOMER: **MacL Energy Co. Lease**
WELL NO.: **#3**
JOB TYPE: **Run RBP F.O. Pipes**
DATE: **8-9-88**

WELL DATA

FIELD _____ SEC. **31** TWP. **17** RNG. **23** COUNTY **Ncss** 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 **RBP** SET AT **961**

BOTTOM HOLE TEMP. _____ PRESSURE _____

MISC. DATA _____ TOTAL DEPTH **4475**

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	u	10.5	4 1/2	6L	4475	
LINER						
TUBING	u		2 3/8	6L	827	
OPEN HOLE						SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE		
GUIDE SHOE		
CENTRALIZERS		
BOTTOM PLUG		
TOP PLUG		
HEAD		
PACKER RBP	4 1/2	1
OTHER		Howco

JOB DATA

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE 8-9-88	DATE 8-9-88	DATE 8-9-88	DATE 8-9-88
TIME 06:30	TIME 07:45	TIME 08:30	TIME 13:30

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
T. Fuchs	3580	Ness City, KS
B. Crosswhite	Combo.	Ness City, KS
D. Mascher	0818	Hampton, KS
T. Fuchs	3443	Ness City, KS

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 **Tools**

DESCRIPTION OF JOB **Run RBP F.O. Practices to cut F.O. tool**

JOB DONE THRU: TUBING CASING ANNULUS TBG./ANN.

CUSTOMER REPRESENTATIVE **X O.D. Halliburton**

HALLIBURTON OPERATOR **T. Fuchs** COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	TYPE	API CLASS	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
1	150	HLC	A	Pozmix B	B	1/2 # Flocele	1.84	12.7
	25	HLC	A	Pozmix B	B	1/2 # Flocele 27cc.	1.84	12.7

PRESSURES IN PSI

CIRCULATING _____ DISPLACEMENT _____

BREAKDOWN _____ MAXIMUM _____

AVERAGE _____ FRACTURE GRADIENT _____

SHUT-IN: INSTANT _____ 5-MIN. _____ 15-MIN. _____

ORDERED _____ AVAILABLE _____ USED _____

TREATING _____ DISPL. _____ OVERALL _____

FEET _____ REASON _____

SUMMARY

PRESLUSH: BBL.-GAL. _____ TYPE _____

LOAD & BKDN: BBL.-GAL. _____ PAD: BBL.-GAL. _____

TREATMENT: BBL.-GAL. _____ DISPL: BBL.-GAL. **3**

CEMENT SLURRY: BBL.-GAL. **57.3**

TOTAL VOLUME: BBL.-GAL. _____

REMARKS

JOB LOG

WELL NO. #3 LEASE L-1a TICKET NO. 62)296

CUSTOMER Meck Energy Co. PAGE NO. #1

JOB TYPE Run RBF + F.O. Fingers DATE 8-7-88

FORM 2012-R-2

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
1	06:00							Called out
	07:45							On location
	08:30							Start tool
	09:30							Set plug at 961H
	10:05							Test plug @ 800 PSI
	10:25							HOPE @ spot sand
	10:46							Open F.O.
	10:50							Close F.O.
	11:12	3.57						Reverse out
	11:15							Pulled fingers
	11:30							Run over plot
	12:20							Wash sand off plug
	12:30							Pulled PBA
	13:15							Job completed
	14:15							Thank you T.F.

RECEIVED
STATE CORPORATION COMMISSION

SEP - 6 1988

CONSERVATION DIVISION
Wichita, Kansas

T. Fuchs = B1493