

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1056304

Form ACO-1 June 2009 Form Must Be Typed Form must be Signed All blanks must be Filled

# WELL COMPLETION FORM

### WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License #		API No. 15
Name:		Spot Description:
Address 1:		
Address 2:		Feet from North / South Line of Section
City: Sta	ate: Zip:+	Feet from East / West Line of Section
		Footages Calculated from Nearest Outside Section Corner:
, , , , , , , , , , , , , , , , , , ,		County:
		Lease Name: Well #:
		Field Name:
-		
		Producing Formation:
Designate Type of Completion:		Elevation: Ground: Kelly Bushing:
New Well Re-I	Entry Workover	Total Depth: Plug Back Total Depth:
Oil WSW	SWD SIOW	Amount of Surface Pipe Set and Cemented at: Fee
Gas D&A	ENHR SIGW	Multiple Stage Cementing Collar Used? Yes No
OG	GSW Temp. Abd.	If yes, show depth set: Fee
CM (Coal Bed Methane)		If Alternate II completion, cement circulated from:
Cathodic Other (Core,	Expl., etc.):	feet depth to:w/sx cmi
If Workover/Re-entry: Old Well Info	o as follows:	
Operator:		
Well Name:		Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Original Comp. Date:	Original Total Depth:	
Deepening Re-perf.	Conv. to ENHR Conv. to SWD	Chloride content: ppm Fluid volume: bbls
		Dewatering method used:
Plug Back:	Plug Back Total Depth	Location of fluid disposal if hauled offsite:
Commingled	Permit #:	
Dual Completion	Permit #:	Operator Name:
	Permit #:	Lease Name: License #:
	Permit #:	Quarter Sec TwpS. R East Wes
GSW	Permit #:	County: Permit #:
Spud Date or Date Read Recompletion Date	ched TD Completion Date or Recompletion Date	

#### AFFIDAVIT

I am the affiant and I hereby certify that 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.

## Submitted Electronically

KCC Office Use ONLY
Letter of Confidentiality Received
Date:
Confidential Release Date:
Wireline Log Received
Geologist Report Received
UIC Distribution
ALT I II III Approved by: Date:

	Side Two	1
Operator Name:	Lease Name:	Well #:
Sec TwpS. R East _ West	County:	

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems 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 test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken (Attach Additional Shi	eets)	Yes	No		og Formatio	n (Top), Depth an	d Datum	Sample
Samples Sent to Geolog	,	Yes	No	Nam	e		Тор	Datum
Cores Taken Electric Log Run Electric Log Submitted B (If no, Submit Copy)	Electronically	Yes Yes Yes Yes	] No ] No ] No					
List All E. Logs Run:								
			CASING R			on etc		
Purpose of String	Size Hole Drilled	Size Casin Set (In O.D	g	onductor, surface, inte Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

#### ADDITIONAL CEMENTING / SQUEEZE RECORD

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

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated					)e			ement Squeeze Record of Material Used)	Depth
TUBING RECORD:	Siz	ze:	Set At:	:	Packer	r At:	Liner R	Run:	No	
Date of First, Resumed I	Product	ion, SWD or ENH	۲.	Producing N	lethod:	ping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	ls.	Gas	Mcf	Wate	er	Bbls.	Gas-Oil Ratio	Gravity
DISPOSITIC	ON OF C	GAS:			METHOD	OF COMPLE	TION:		PRODUCTION INT	ERVAL:
Vented Sold		Used on Lease		Open Hole	Perf.	Dually (Submit )	Comp. 4 <i>CO-5)</i>	Commingled (Submit ACO-4)		
(If vented, Sub	mit ACC	)-18.)		Other (Specify)						

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	PostRock Midcontinent Production LLC
Well Name	HAHN 2-1
Doc ID	1056304

All Electric Logs Run

CDL	
DIL	
NDL	
TEMP	



DATE

211 W. 14TH STREET, CHANUTE, KS 66720 620-431-9500

D10088

TICKET NUMBER	V	7	0	7	7
FIELD TICKET REP	= #		_		

/

FOREMAN Joe Blanchard

ssi 15-099-24635

API \_

**TREATMENT REPORT & FIELD TICKET CEMENT** WELL NAME & NUMBER

DATE		WELLN	IAME & NUMBE	R	SEC	TION	TOWNSHI	P	RANGE	COUNTY
1-10-11	HAhN	2	-1		2	?	35		17	LR
FOREMAN / OPERATOR		TIME OUT	LESS LUNCH	TRUCK #	TRAILI	R		UCK URS		EMPLOYEE
Joe BIANCH	hard 7:00	12:30		904850		·	5.		1	24 L O
Day Wall		1		931310	9328	<u>۲</u>	1	0	10	<u>_ Des-Inc</u>
OTTO G. POW		1 1		903/97						A Do
MAHNAF	$O' \rightarrow \cdots \rightarrow \cdots$			903600				/	- Ch Day	and the
				9/3585	91783	7		/	- M.	antell
VesleyGa	H DRA			912283	1105	-(			_(v,e	Deg Jh
DISPLACEMENT_	5 13.5 SLURI 24.43 DISPL 5 154 51/2 1 5 of Comany	ACEMENT PSI .		1IX PSI		RATE _	46pn	η		s 16 BBI 1 bottom
	D Casing	9:30	STart.	ed Cement	- 11:30	Ld	4 loc	otic	$\nu / \omega_{0}$	2:30
			C.	ed Cement ement to Description of se	s Susfa	ce	4 loc	otic	<u>/ در د</u>	TOTAL
ACCOUNT CODE	D Casing	JNITS	C.	ement to	s Susfa	ce	4 loc	otic		
ACCOUNT CODE 104850 10397	QUANTITY or L	JNITS Fore Cem	C. man Pickup ent Pump Truck	ement to	s Susfa	ce	+ loe	o.+.c		TOTAL
ACCOUNT CODE 104850 10397	QUANTITY or L	JNITS Fore Cem Bulk	C . man Pickup ent Pump Truck Truck	ement to	s Susfa	ce	4 loe			TOTAL
ACCOUNT CODE 04850 10397	QUANTITY or L	JNITS Fore Cem Bulk Trans	C. man Pickup ent Pump Truck	ement to	s Susfa	ce	t loe			TOTAL
ACCOUNT CODE 104850 10397	QUANTITY or L	JNITS Fore Cem Bulk Trans	C. man Pickup ent Pump Truck Truck sport Truck sport Truck	ement to	s Susfa	ce	4 loc	<u>.</u>		TOTAL
ACCOUNT CODE 104850 703697	QUANTITY or L	JNITS Fore Cem Bulk Trans Trans 80 Va	C. man Pickup ent Pump Truck Truck sport Truck sport Trailer ac	ement to	s Susfa	ce	4 100			TOTAL
ACCOUNT CODE 704850 703697	QUANTITY or L	JNITS Fore Cem Bulk Trans Trans 80 Va 24 F <del>f</del> Casir	C. man Pickup ent Pump Truck Truck sport Truck sport Trailer ac	ement to	s Susfa	ce	4 loc			TOTAL
ACCOUNT CODE 704850 703697	QUANTITY or L	JNITS Fore Cem Bulk Trans Trans 80 Va 24 Ff Casir Centr	C. man Pickup ent Pump Truck Truck sport Truck sport Truck sport Trailer ac	ement to	s Susfa	ce	4 loc			TOTAL
ACCOUNT CODE 704850 703697	QUANTITY or L	JNITS Fore Cem Bulk Trans Trans 80 Va 24 F <del>f</del> Casir Centr Contr Float	C. man Pickup ent Pump Truck sport Truck sport Trailer ac ng ralizers Shoe r Plug	CMELT J	s Susfa	ce	<u>+ 100</u>			TOTAL
ACCOUNT CODE 704850 703697	QUANTITY or U QUANTITY or U 5. 5 1025.9	JNITS Fore Cem Bulk Trans 80 Va 24 Ff Casir Centr Centr I Vipe 2 Frac I	C man Pickup ent Pump Truck Truck sport Truck sport Truck sport Trailer ac 19 ralizers Shoe r Plug Baffles 477	ement to	s Susfa	ce	4 loc			TOTAL
ACCOUNT CODE 104850 703697	QUANTITY or U QUANTITY or U 5.5 1025.9 1025.9	JNITS Fore Cem Bulk Trans Trans 80 Ve Centr C Centr Float I Wipe 2 Frac I S Portla	C. man Pickup ent Pump Truck Truck sport Truck sport Trailer ac ng ralizers Shoe r Plug Baffles 477 und Cement	CMELT J	s Susfa	ce	4 100			TOTAL
ACCOUNT CODE 104850 703697	QUANTITY or U QUANTITY or U 5.5 1025.9 1025.9	JNITS Fore Cem Bulk Trans Trans 80 Va 24 Ff Casir 6 Centr 1 Vipe 2 Frac I 2 Frac I 3 Sk Portla	C. man Pickup ent Pump Truck Truck sport Truck sport Trailer ac 19 ralizers Shoe r Plug Baffles 477 and Cement nite	CMELT J	s Susfa	ce				TOTAL
ACCOUNT CODE 104850 703697	QUANTITY or U QUANTITY or U 5.5 1025.9 1025.9	UNITS Fore Cem Bulk Trans 80 $\forall z$ $z \neq Ff$ Casir C Centr C C Centr C C Centr C C C C C C C C C C C C C C C C C C C	C man Pickup ent Pump Truck Truck sport Truck sport Truck sport Trailer ac 19 ralizers Shoe r Plug Baffles 477 ind Cement nite eal	CMELT J	s Susfa	ce				TOTAL
ACCOUNT CODE 704850 703697	QUANTITY or U QUANTITY or U 5.5 1025.9 1025.9	UNITS Fore Cem Bulk Trans 80 Va 24 Ff Casir Contr Contr Float I Wipe 2 Frac I 0 SK Portla 0 SK Portla 0 SK Portla 0 SK Pic-Sr 7 SK Premi	C. man Pickup ent Pump Truck Truck sport Truck sport Trailer ac ng ralizers Shoe r Plug Baffles 477 and Cement nite eal ium Gel	CMELT J	s Susfa	ce				TOTAL
starte	QUANTITY or U QUANTITY or U 5.5 1025.9 1025.9	UNITS Fore Cem Bulk Trans 80 Va 24 Ff Casir Contr Contr Float I Wipe 2 Frac I 0 SK Portla 0 SK Portla 0 SK Portla 0 SK Pic-Sr 7 SK Premi	C. man Pickup ent Pump Truck Truck sport Truck sport Trailer ac ng ralizers Shoe r Plug Baffles 4777 and Cement nite eal ium Gel hloride	ement for Description of se	s Susfa	ce				TOTAL
STarte ACCOUNT CODE 704850 70397	QUANTITY or L QUANTITY or L 5.5 1025.9 1025.9 10 20 3 1	JNITS Fore Cem Bulk Trans 80 Ve 24 Ff Casir Centr Contr Float I Wipe 2 Frac I 3E Portla 3E Gilson 5E Flo-Si 75E Premi 5E Cal C KCL	C man Pickup ent Pump Truck Truck sport Truck sport Truck sport Trailer ac 19 ralizers Shoe r Plug Baffles 4117 ntte eal ium Gel hloride 51/2	CMELT J	s Susfa	ce				TOTAL
STarte ACCOUNT CODE 704850 70397	QUANTITY or L QUANTITY or L 5.5 1025.9 1025.9 10 20 3 1	UNITS Fore Cem Bulk Trans 80 Ve 2 FF Casir Contr Float I Wipe 2 Frac SK Portla SK Portla SK Premi SK Cal C KCL- 2000 City W	C man Pickup ent Pump Truck Truck sport Truck sport Truck sport Trailer ac 19 ralizers Shoe r Plug Baffles 4117 ntte eal ium Gel hloride 51/2	ement for Description of se	s Susfa	ce				TOTAL

Rig Number:         1         S. 2         T. 35         R.17 E           API No.         15-         099-24635 Elev.         807         County:         LB           Location:         NW SW         Second         NW SW           Operator:         POSTROCK         Advessed         Second         NW SW           Oberator:         210 Park Ave Ste 2750 Oklahoma City, OK 73102-5641         Well         Second         SoUTH Line           Footage Location:         1980         ft. from the         SOUTH Line         660         ft. from the         WEST Line           Drilling Contractor:         McPherson Drilling LLC         Spud date:         1/6/2011         Geologist:         Ken Recoy           Date Completed:         1/7/2011         Total Depth:         1032         1032           Size Hole:         11"         7 7/8"         odor 230         hit water at 440           Setting Depth:         22         MCP         DRILLER:         Andy Coats
Elev.807Location:NW SWOperator:POSTROCKAddress:210 Park Ave Ste 2750 Oklahoma City, OK 73102-5641Well No:2-1Lease Name:Footage Location:1980ft. from theSolig Contractor:McPherson Drilling LLC Spud date:1/6/2011Geologist:Ken Recoy Date Completed:Date Completed:1/7/2011Total Depth:1032Size Hole:11" 8 5/8"Size Hole:5/8"Ower and the second data Setting Depth:22 23#MCP 
Operator:       POSTROCK         Address:       210 Park Ave Ste 2750         Oklahoma City, OK 73102-5641         Well No:       2-1       Lease Name:       HAHN         Footage Location:       1980       ft. from the       SOUTH Line         660       ft. from the       WEST Line         Drilling Contractor:       McPherson Drilling LLC       Spud date:       1/6/2011         Spud date:       1/6/2011       Geologist:       Ken Recoy         Date Completed:       1/7/2011       Total Depth:       1032         Casing Record         Size Hole:       11"       7 7/8"       odor 230         Size Casing:       8 5/8"       odor 230       hit water at 440         Setting Depth:       22       MCP       DRILLER:       Andy Coats         Type Cement:       Portland       MCP       DRILLER:       Andy Coats         Soil       0       3       black shale       474       476         shale       3       14       sand shale       476       511         Soil       0       3       black shale       518       519          Soil       0
Address:210 Park Ave Ste 2750 Oklahoma City, OK 73102-5641Well No:2-1Lease Name:HAHNFootage Location:1980ft. from theSOUTH Line 660Drilling Contractor:McPherson Drilling LLCSpud date:1/6/2011Geologist:Ken Recoy 1032Date Completed:1/7/2011Total Depth:1032Casing RecordSize Hole:11"7 7/8" 9 StarSize Hole:11"7 7/8"odor 230 hit water at 440Setting Depth:23# 4MCPDRILLER:Andy Coats4MCPDRILLER:Veil LogFormationTopBtm.Btm.HRS.FormationTopBtm.soil03black shale474476shale314sand shale476511lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624
Address:210 Park Ave Ste 2750 Oklahoma City, OK 73102-5641Well No:2-1Lease Name:HAHNFootage Location:1980ft. from theSOUTH Line 660Drilling Contractor:McPherson Drilling LLCSpud date:1/6/2011Geologist:Ken Recoy 1032Date Completed:1/7/2011Total Depth:1032Casing RecordSize Hole:11"7 7/8" 9 StarSize Hole:11"7 7/8"odor 230 hit water at 440Setting Depth:23# 4MCPDRILLER:Andy Coats4MCPDRILLER:Veil LogFormationTopBtm.Btm.HRS.FormationTopBtm.soil03black shale474476shale314sand shale476511lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624
Oklahoma City, OK 73102-5641Well No: $2-1$ Lease Name:HAHNFootage Location:1980ft. from theSOUTH LineFootage Location:1980ft. from theSOUTH LineDrilling Contractor:McPherson Drilling LLCSpud date:1/6/2011Geologist:Ken RecoyDate Completed:1/7/2011Total Depth:1032Casing RecordSize Hole:SurfaceProductionSize Casing:8 5/8"odor 230Weight:23#hit water at 440Setting Depth:22MCPType Cement:PortlandMCPDRILLER:Andy CoatsSoil0Soil003black shale414the Stand shale419shale511518Soil0314sand shale419shale511518Shale1931black shale518519591coal495062Shale592624
Well No: $2 \cdot 1$ Lease Name:HAHNFootage Location:1980ft. from theSOUTH LineFootage Location:1980ft. from theSOUTH LineDrilling Contractor:McPherson Drilling LLCSpud date:1/6/2011Geologist:Ken RecoyDate Completed:1/7/2011Total Depth:1032Casing RecordSize Hole:11"7 7/8"Size Casing:8 5/8"odor 230Weight:23#MCPDRILLER:Andy CoatsMcPVeiting Depth:22MCPPortlandMCPDRILLER:Andy Coatssoil0314sand shale474soil03soil03shale1931black shale511518shale1931black shale519591591coal495062shale592624
Well No: $2 \cdot 1$ Lease Name:HAHNFootage Location:1980ft. from theSOUTH LineFootage Location:1980ft. from theSOUTH LineDrilling Contractor:McPherson Drilling LLCSpud date:1/6/2011Geologist:Ken RecoyDate Completed:1/7/2011Total Depth:1032Casing RecordSize Hole:11"7 7/8"Size Casing:8 5/8"odor 230Weight:23#odor 230Setting Depth:22MCPType Cement:PortlandMCPDrilLLER:Andy CoatsSoil03Soil03Soil03Soil03Soil03Soil03Soil03Soil03Soil03Soil03Soil03Soil0Soil0Soil0Soil0Soil14Soil1518Shale1518Shale519Soil62Soil62Soil63Soil64Soil591Soil63Soil63Soil63Soil63Soil63Soil63Soil63 <t< td=""></t<>
660         ft. from the         WEST         Line           Drilling Contractor:         McPherson Drilling LLC         Spud date:         1/6/2011         Geologist:         Ken Recoy           Date Completed:         1/7/2011         Total Depth:         1032         1032           Casing Record         Rig Time:           Size Hole:         11"         7 7/8"         odor 230           Weight:         23#         hit water at 440         setting Depth:         22           Setting Depth:         22         MCP         DRILLER:         Andy Coats           Setting Depth:         22         MCP         DRILLER:         Andy Coats           Soil         0         3         black shale         474         476           shale         3         14         sand shale         476         511           lime         14         19         shale         513         518         519           lime         31         49         shale         518         519         591           coal         49         50         coal         591         592         592
660ft. from theWESTLineDrilling Contractor:McPherson Drilling LLCSpud date:1/6/2011Geologist:Ken RecoyDate Completed:1/7/2011Total Depth:1032Casing RecordSize Hole:11"Size Casing:8 5/8"23#odor 230Weight:23#23#MCPPortlandMCPPortlandMCPPortlandMCPSoil03black shale41419shale314shale511Sine193145062Shale59159262
McPherson Drilling LLCSpud date: $1/6/2011$ Geologist:Ken RecoyDate Completed: $1/7/2011$ Total Depth: $1032$ Casing RecordSize Hole:SurfaceProductionSize Casing: $85/8$ "odor 230Weight: $23#$ hit water at 440Setting Depth: $22$ MCPType Cement:PortlandMCPVell LogFormationTopBtm.Soil03black shale474Soil03black shale476Shale314sand shale476Shale1931black shale511Shale1931black shale518Soil062shale591Soil62shale592624
Spud date: $1/6/2011$ Geologist:Ken RecoyDate Completed: $1/7/2011$ Total Depth: $1032$ Casing RecordSize Hole:SurfaceProduction $11"$ 7 7/8"odor 230Weight:23#odor 230 $23#$ bit water at 440Setting Depth:22MCPDRILLER:PortlandMCPWell LogFormationTopBtm.HRS.FormationTopBtm.HRS.FormationTopSoil03black shale474Soil03black shale476Shale314sand shale511Ime1419shale511Shale1931black shale518Shale1931black shale519Sinale193149shale519Sinale5062shale592Ime5062shale592
Date Completed: $1/7/2011$ Total Depth: $1032$ Casing RecordRig Time:Size Hole: $11"$ $77/8"$ $0 dor 230$ Size Casing: $85/8"$ $0 dor 230$ $hit water at 440$ $Jacobic Casing Cas$
Surface         Production           Size Hole:         11"         7 7/8"           Size Casing:         8 5/8"         odor 230           Weight:         23#         odor 230           Setting Depth:         22         MCP           Type Cement:         Portland         MCP           Book         MCP         DRILLER:           Weil Log           Setting Depth:           22         MCP           Portland         MCP         DRILLER:         Andy Coats           Weil Log           Formation         Top         Btm.           Soil         0         3         black shale         474         476           shale         3         14         sand shale         476         511           Ime         14         19         shale         511         518           shale         19         31         black shale         519         591           coal         49         50         coal         591         592           lime         50         62         shale         592         624
SurfaceProductionSize Hole:11"7 7/8"Size Casing:8 5/8"odor 230Weight:23#odor 230Setting Depth:22MCPType Cement:PortlandAndy CoatsMCPVerent:PortlandSacks:4MCPDRILLER:Andy CoatsVerent:PortlandSoil03black shale419shale311419shale5111518shale193149Soil6262592624
Size Hole:11"7 7/8"odor 230Size Casing:8 5/8"odor 230Weight:23#hit water at 440Setting Depth:22MCPType Cement:PortlandAdv Coats:MCPVeight:4MCPDRILLER:Andy CoatsVell LogFormationTopBtm.HRS.FormationTopBtm.HRS.Soil03black shale4744119shale5111ime1419Shale511518shale193149Shale5195062Shale591592624
$\begin{array}{c c c c c c c c c c c c c c c c c c c $
Weight:23# 22MCP MCPhit water at 440 DRILLER:Andy CoatsType Cement:Portland 4MCPDRILLER:Andy CoatsWell LogFormationTopBtm.HRS.FormationTopBtm.Soil03black shale474476shale314sand shale476511lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624
Setting Depth: Type Cement: Sacks:22 Portland 4MCPDRILLER: DRILLER:Andy CoatsFormationTopBtm.HRS.FormationTopBtm.Soil03black shale474476shale314sand shale476511lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624
Type Cement: Sacks:Portland 4MCPDRILLER:Andy CoatsMCPDRILLER:Andy CoatsWell LogFormationTopBtm.HRS.FormationTopBtm.Soil03black shale474476shale314sand shale476511lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624
Sacks:4MCPFormationTopBtm.HRS.FormationTopBtm.soil03black shale474476shale314sand shale476511lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624
FormationTopBtm.HRS.FormationTopBtm.soil03black shale474476shale314sand shale476511lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624
FormationTopBtm.HRS.FormationTopBtm.soil03black shale474476shale314sand shale476511lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624
FormationTopBtm.HRS.FormationTopBtm.soil03black shale474476shale314sand shale476511lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624
shale314sand shale476511lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624
lime1419shale511518shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624
shale1931black shale518519lime3149shale519591coal4950coal591592lime5062shale592624
lime3149shale519591coal4950coal591592lime5062shale592624
coal4950coal591592lime5062shale592624
lime 50 62 shale 592 624
shale 62 180 sand 624 645
black shale 180 181 coal 645 648
lime 181 211 sand shale 648 668
coal 211 213 black shale 668 670
shale 213 220 shale 670 682
oil sand 220 230 sand 682 687
sand shale 230 321 sand shale 687 720
oswego lime 321 352 black shale 720 722
summit 352 357 shale 722 731
lime 357 387 sand shale 731 735
mulkey 387 393 shale 735 748
lime 393 399 black shale 748 750
shale 399 409 shale 750 757
shale         399         409         shale         750         757           coal         409         411         black shale         757         760
coal 409 411 black shale 757 760
coal409411black shale757760shale411447shale760825

Gas Tests:	
	MCF
195	0
229	0
379	1.83
404	7.06
429	7.06
455	7.06
520	7.06
605	34.0
685	34.0
780	8.95
830	34.0
885	37.6
915	37.6
1032	37.6
Comments:	
Start injecting @	

Well Log								
Formation	Тор	Btm.	HRS. Formation	Тор	Btm.	Formation	Тор	Btm.
soil	0	3	black shale	474	476	coal	873	875
shale	3	14	sand shale	476	511	shale	875	886
lime	14	19	shale	511	518	Miss lime	886	1032
shale	19	31	black shale	518	519			
lime	31	49	shale	519	591			
coal	49	50	coal	591	592			
lime	50	62	shale	592	624			
shale	62	180	sand	624	645			
black shale	180	181	coal	645	648			
lime	181	211	sand shale	648	668			
coal	211	213	black shale	668	670			
shale	213	220	shale	670	682			
oil sand	220	230	sand	682	687			
sand shale	230	321	sand shale	687	720			
oswego lime	321	352	black shale	720	722			
summit	352	357	shale	722	731			
lime	357	387	sand shale	731	735			
mulkey	387	393	shale	735	748			
lime	393	399	black shale	748	750			
shale	399	409	shale	750	757			
coal	409	411	black shale	757	760			
shale	411	447	shale	760	825			
black shale	447	448	coal	825	828			
sand shale	448	474	shale	828	873			