ORIGINAL

## CONFIDENTIAL

### KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

# September 1999 REI Form Quist Be Typed

### WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

FROM

Form ACO-1

Operator: License #33300	API No. 15 - 0432004800 - 00
Operator: License #	County: Doniphan
4404 4711 Otro-at Cuito 4200	NW SW NF are 23 Tun 4 & P 20 7 Fast West
Address: 1401 17th Street, Suite 1200 RECEIVED  City/State/Zip: Denver CO 80202	1700 feet from S (N circle one) Line of Section
r urchasor.	Factoria Calculated from Nearest Outside Section Corner:
Operator Contact Person: Tom Hemler KCC WICH	(circle one) NE SE NW SW
Phone: (303) 298-8100 ext 1330	Oakland Valley 32-23 WD
Contractor: Name: Layne Christensen Company	Forest City Coal Gas Area
License: 32999	Producing Formation: Cherokee Group
Wellsite Geologist: Richard Robba, PG	Elevation: Ground: 1055' Kelly Bushing: 1055'
Designate Type of Completion:	Total Depth: 1672 Plug Back Total Depth: NA
New Well Re-Entry Workover	
OilSWDSIOWTemp. Abd.	Amount of Surface Pipe Set and Semontou at
Gas ENHR SIGW	Multiple Stage Cementing Collar Used?
Dry Other (Core, WSW, Expl., Cathodic, etc)	If yes, show depth setFee
If Workover/Re-entry: Old Well Info as follows:	If Alternate II completion, cement circulated from
Operator:	feet depth tosx cm
Well Name:	
Original Comp. Date: Original Total Depth:	Diming ridia management ridii
Deepening Re-perf Conv. to Enhr./SWI	
Plug Back Plug Back Total Depth	Dewatering method used trucked to disposal well
Commingled Docket No	
Dual Completion Docket No	Editation of fidia disposal if fidance choice
	Operator Name: Evergreen Operating Corporation
	Lease Name: Amon 41-30 WD License No.: 30000
2/14/2004 2/20/2004 WOCU/ TA 4/22/ Soud Date or Date Reached TD Completion Date of	Quarter_NE Sec Iwp S. R V East Wes
Spud Date or Date Reached TD Completion Date Recompletion Date	te County: Jackson Docket No.: D28292
Kansas 67202, within 120 days of the spud date, recompletion, Information of side two of this form will be held confidential for a per 107 for confidentiality in excess of 12 months). One copy of all wire	filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Priod of 12 months if requested in writing and submitted with the form (see rule 82-3-line logs and geologist well report shall be attached with this form. ALL CEMENTING apply wells. Submit CP-111 form with all temporarily abandoned wells.
All requirements of the statutes, rules and regulations promulgated herein are complete and correct to the best of my knowledge.	to regulate the oil and gas industry have been fully complied with and the statemer
Signature: Scott Com	KCC Office Use ONLY
VP Operations & Engineering - 6/7/2004	Letter of Confidentiality Attached
	ANN If Denied, Yes Date:
Subscribed and sworn to before me this day of	, Wireline Log Received
20 <u>04</u> .	Geologist Report Received
Notary Public: Aari-Enn Watte	UIC Distribution

#### Side Two

Operator Name: Eve	rgreen Operating	Corporation	Lease N	lame:_	Dakland Vall	∋y	Well #: _32-	-23 WD
Sec. 23 Twp. 4	S. R. <u>20</u>	✓ East	County:			· · · · · · · · · · · · · · · · · · ·		
tested, time tool open temperature, fluid reco	and closed, flowing overy, and flow rates	nd base of formations and shut-in pressures if gas to surface test, nal geological well site	s, whether shu along with fina	t-in pre	ssure reached	static level, hydr	ostatic pressu	res, bottom hole
Drill Stem Tests Taker (Attach Additional S		Yes V No		<b>√</b> L	og Formati	on (Top), Depth	and Datum	Sample
Samples Sent to Geol	logical Survey	☐ Yes 🗸 No		Nam Starl	е к Shale		Тор <b>747</b>	Datum <b>308</b>
Cores Taken		✓ Yes No			nsas City		747 797	258
Electric Log Run		✓ Yes			nount		907	148
(Submit Copy)		RECEIVED		Sum	mit		986	69
List All E. Logs Run:				Exce	ello		1010	45
SI, CNL, CBL		JUN 1 4 2004		V.S	hale		1090	-35
	K	CC WICHITA	A	Tebo	Shale		1171	-116
				Miss	issippi		1648	-593
		CASING Report all strings set-	G RECORD		w Used			
Purpose of String	Size Hole	Size Casing	Weight	t	Setting	Type of	# Sacks	Type and Percent
Surface	Drilled	Set (In O.D.)	Lbs./F	t.	Depth	Cement	Used	Additives
Surface	12 1/4	8 5/8	24		216	Portland	140	2% cacl2, 3% Gilsonite
		ADDITIONA	L CEMENTING	/ SQU	EEZE RECORD	}		
Purpose: Depth Top Bottom		Type of Cement #Sacks Used		sed	Type and Percent Additives			
Protect Casing Plug Back TD Plug Off Zone								
Shots Per Foot PERFORATION RECORD - Bridge Plugs Specify Footage of Each Interval Perfo			igs Set/Type erforated		Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used) Der			rd Depth
					***************************************	DELE	ACED	
							ASED	
							OM	_
						CONFIL	PENTIA	L
TUBING RECORD	Size	Set At	Packer At		Liner Run			
Date of First, Resumerd I	Production, SWD or En	hr. Producing Met	personal personal	Flowing	Pumpir	Yes No		er (Explain)
Estimated Production Per 24 Hours		bls. Gas	Mcf	Water			Gas-Oil Ratio	Gravity
Disposition of Gas	METHOD OF CO	MPLETION			Production Interv	ral		
Vented Sold (If vented, Subr	Used on Lease	Open Hole Other (Spec	Perf.	Di	ually Comp.	Commingled _		

#### Professional Energy Services

9402 Kessler Lane Shawnee Mission, KS 66212 Ph.913.341.7434

### CONFIDENTIAL

**GEOLOGICAL REPORT** 

RELEASED FROM CONFIDENTIAL

Operator: EVERGREEN OPERATING CORPORATION

Project: Jordon Well Name: Oakland Valley 32-23 WD

Location: SENWSWNE 1700'FNL & 2165' FEL Sec. 23-4S-20E County: Jackson State: Kansas All measurements GL: 1055' API: 15-043-20048-00-00 Company: Sr. Operations Engineer: Mr. Tom Erwin

Company: Geologist: Mr. Paul Clarke

Professional Energy Services: Geologist: Rich Robba

Crown: Drilling Superintendent: Fred O'Doan
Patterson Logging: Engineer: Roger Taylor
Drilling Contractor: Layne Christensen Company
CBM Solutions: Description: Description:

CBM Solutions: Desorption: Dean/Ken Glover/Dion Geosearch Logging: Mudloggers: Kevin Clark/Nathan Barnes

Commenced: 02/16/04 Completed: 02/20/04

RECEIVED

JUN 1 4 2004

KCC WICHITA

This geological report is prepared for **EVERGREEN OPERATING CORPORATION**. Wellsite geological supervision was conducted from surface to Total Depth. The Oakland Valley 32-23 WD was water drilled to core point, continuous cored from the Excello Shale to the Mississippi and then deepened by rotary to TD. ROP, gas curves and sample descriptions from water rotary chips are recorded on the mud log and geophysical survey formation tops, visual core recovery descriptions and desorption canisters are listed below.

#### Oakland Valley 32-23 WD

This well's geophysical survey indicates multiple coal intersections between the Excello and Bartlesville Sand that were not recovered during the continuous coring operations. The core was measured after each pull and results did not indicate any significant core loss through this referenced section. It is recommended to review the coals listed below with core field descriptions and canister data when calculating actual coal vs CDL Neutron coal thicknesses.

#### Formation E-Log Tops

Heebner Shale:	266'	Excello:	1010'
Lansing:	499'	VShale:	1090'
Stark Shale:	747'	Tebo Shale:	1171'
B/Kansas City:	797'	SMP Mississippi:	1648'
Altamount:	907'	RTD:	1672'
Summit:	986'	LTD( 33' fill):	1672

**EVERGREEN OPERATING CORP.**Oakland Valley 32-23 WD Geological Report Page 2 of 4

### RELEASED FROM CONFIDENTIAL

#### Coal and Coal Shale Intersections Core or E-Log (See note on page one- coal thickness.)

Net	Coals	(ft) <	< 1 '	75	a cc
1401	Cuaisi	(11)	<b>~</b> 1.	<i>,</i> ,	u.cc

Net Coals(ft) >1.75g.cc< 2.00 g.cc

Net Carbonaceous Shale (ft)

Name/Canister	Depth	Name/Canister	Depth	Name/Canister	Depth
Mulberry	923-923.8	Oswego	972.4-973	Iron Post	1041.8-1042.2
Bevier/242	1069.6-1070.8	Rowe C	1495-1495.6	Croweburg	1111-1112
Vshale/478	1092-1093	Rowe D	1516.5-1517	Drywood/T63	1479-1481
Fleming/482	1125-1126.2			•	
Mineral	1134.5-1135.2				
Tebo/494&650	1172-1173				
Weir B	1200-1201.3				
Weir C/652	1215.7-1216.7				
Rowe B/684	1488.2-1490				
Rowe E/658	1521.7-1523.7				

#### Cumulative Net Thickness Density E-Log

Net Coals (ft) < 1.75 g.cc

Net Coals (ft)>1.75g.cc < 2.00 g.cc

Net Carbonaceous Shale (ft)

11.0'

2.7'

3.4'

#### Visual Core Sample Descriptions

1010-1012 SHALE: blk, carb, blky, ns.

1012-1015 SHALE: dk gy grading to sh lt gy, sdy w/ foss ls.

1015-1020 UNDERCLAY: gr-gy, cs tx.

1020-1031 MUDSTONE: gy, soft, blky.

1031-1040 SHALE: dk gy, fissile, gritty in part with ls bkn pcs and burrow fill.

1040-1043 SHALE: blk, med carb content, fissile.

1043-1050 SHALE: gy-gr, hard w/ occ thin v lt gy sh layers.

1050-1050.6 COAL SHALE: blk, organic rich, pyr, 1" coal seam, ns.

1051-1055 SANDSTONE: vshly, vfngn, well sorted, gy.

1055-1067 SHALE: dk gy w/ numerous lt gy sh thin beds, occ 1" bands brn sh.

1067.7-1068.4 COAL: shly 1" bands, blk, v dk gy, p cleating, trc gas, pyr.

1069-1070 UNDERCLAY: gr w/ blk sh, v carb layers and bkn pcs, med-cs tx.

1070-1084 SHALE: gr w/ wh and blk nodules, few maroon layers w/ many shell molds in blk sh towards base.

1084-1087 LIMESTONE: vfnxln, wh-gy, chky w/ 6" low carb band.

1087-1089 SHALE: blk w/ bioturbidites.

1089.8-1090.8 COAL: blk, banded, shly partings, face cleat, no sho gas.

1091-1093 UNDERCLAY: fn tx, varving becoming blk sh at base w/ burrows of brown sh.

#### Visual Core Sample Descriptions

1122.3-1123.6 COAL: dull, banded tx, gy w/ occ bkn pcs carb mat. 1093-1119 SHALE: It gy, chky appearance, no calc, hard, argil in part, nodules. 1119-1122 SHALE: blk-dk gr, w/ calcite fill, pyr, low density, no sho gas. 1124-1128 UNDERCLAY: gr-gr, med-cs tx. 1128-1132 SHALE: It gr w/ v It gy seasonal varving. 1132-1134 SHALE: dk gr w/ blk and maroon, sh, 1" coal shale, no sho gas. 1134-1136 UNDERCLAY: med-cs tx, maroon-gr. 1136-1151 SILTSTONE: It gy-gr w/ seasonal brn and v lt gy sh bands bec/ dk gy w/ slumping towards base. 1151-1169 SHALE: blk, fissile w/ brn sh layers, low carb content at top and inc towards base. 1169.7-1170.5 COAL: in two barrels, banded, p cleating, calcite fill, no sho gas. 1171-1173 UNDERCLAY: brn-gy w/ blk sh thin beds. 1173-1179 SHALE: bl-gr bec/ low carb w/ blk sh layers at base. 1179-1179.2 COAL SHALE: blk, v shly, great density, no sho gas, intact. 1180-1191 UNDERCLAY: med tx, p devel, yell-maroon-gy. 1191-1192 LIMESTONE: medxln, sli chky, foss, v p interxln and foss por. 1192-1197 SHALE: dk gy-blk w/ lt gy 1" sh bands, platy, sli gritty. 1197-1198 SHALE: blk w/ 2" coal. 1198-1200 UNDERCLAY: p devel, blk-gr. 1200-1212 SHALE: blk, low carb w/ thin coal mat, v soft at top and bec/ fissile at base. 1212.8-1213.6 COAL: high ash content, pyr, sh bands, p cleated, no sho gas. 1214-1218 UNDERCLAY: gy-maroon, cs tx. 1218-1222 SILTSTONE: med gn, laminated w/ lt gy sh. 1222-1278 SANDSTONE: med gn, sub rnd, gy, f interxln por, w/ few layers shly varving. 1278-1287 SHALE: gy w/ It gy vsdy thin to ½ inch layers. 1287-1299 SILTSTONE: gy, vshly and gritty. 1299-1317 SANDSTONE: med gn, gy, shly, f sorted, sub ang to sub rnd, excell intergn por, ns. 1317-1353 SANDSTONE: aa w/ thin coal shale layer, friable and lg ang gns grading to base. 1353-1354 SANDSTONE: v coaly, w/ vsdy coal sh. 1354-1371 SANDSTONE: med an sub rnd, friable, excel por. 1371-1380 SHALE: dk gy w/ seasonal ss varving, uniform strata. 1380-1404 SANDSTONE: med gn, sub ang, v friable, gd intergn por, clean. 1404-1415 SHALE AND SANDSTONE: thin varying. 1415-1468 SHALE: gy bec/ dk gy towards base w/ thin lt gy sdy sh varving, occ 6" ss bands. 1468-1476 SANDSTONE: vfn-fngn, friable, well sorted, mica, gd intergn por. 1476-1478 COAL SHALE: high density, high ash content w/ thin coal seams, no sho gas. 1478-1485 SHALE, dk gy w/ shell frags, lt gy sh layers, sdy in part. 1485-1487 COAL: br, banded, shly at top, pyr, f cleating, no sho gas. 1487-1490 UNDERCLAY: p devel, lt gy, fn tx w/ dk gr sh bands. 1490-1491 SHALE, blk, fissile. 1491.7-1492.3 COAL SHALE: high ash content, p cleating, pyr, no sho gas. 1493-1496 UNDERCLAY: wh-gy, p devel, hard, fn tx.

1496-1506 SHALE: gy and dk gy w/ layers of low carb mat.

1506-1511 UNDERCLAY: wh-gy, fn tx, "gritty" w/ 1' low carb sh band.

**EVERGREEN OPERATING CORP.**Oakland Valley 32-35 WD Geological Report Page 4 of 4

#### Visual Core Sample Descriptions

1511-1519 SHALE: blk, fissile, low-med carb content, no sho gas.

1519-1519.8 COAL: mod-high ash content, vp cleating, no sho gas, pyr.

1520-1533 SHALE: blk, med carb to organic rich w/ chunks thin layers coal, few shell beds.

1533-1533.3 COAL: rubble, high density, high ash content, shly w/ shells.

1534-1537 SHALE: blk, fissile, low carb content.

1537-1538 UNDERCLAY: gy, fissile, low carb content.

1538-1539 SHALE: blk, organic rich.

1539-1542 UNDERCLAY: gr-gy, med tx, bkn pcs blk sh.

1542-1608 SANDSTONE: v fn gn, well rnd, well sorted, vp intergn por w/ occ parts w/ lt gy sh to v friable clean sand, speckled and thin bands of heavy minerals and lg brn gtz gns.

1608-1614 SHALE: dk gy w/ slickensides, steep slumping w/ sdy layers.

1614-1614.4 COAL SHALE: high density, no cleats, no sho gas, v shly.

1615-1648 SHALE: gy gritty, sdy in part with sand layers w calc matrix, sh v hard towards base and bec/ calc.

1648-1650 LIMESTONE, fn-medxln, ool, p vis por and sli foss.

#### Conventional Oil and Gas Shows

No shows recorded.

Respectfully submitted,

Richard A. Robba, PG Director of Operations Professional Energy Services

Service Supervisor Customer Date F.R. # 2/16/04 E.O.C. Ray Decker Lease & Well Name Location County - Parish - Block OAKLAND VALLEY 32 - 23 WD SE SE 23 T4S R20E **DONIPHAN** Drilling Contractor Rig # Type of Job District SURFACE 8 5/8" **LAYNE** List - CSG - Hardware **Physical Slurry Properties** Size & Types of Plugs 1 - 8 5/8" GUIDE SHOE Slurry Water Pump Std Top Slurry Std Time WGT YLD **GPS** Slurry Mix **PPG** Ft<sup>3</sup> Hr:Min Water **3 CENTRALIZERS** Btm Materials Furnished 140 SKS Surface 15.5 1.20 5.2 2 LBS RED DYE Bbl. Available Displ. Fluid Availabe mix fluid 500 Bbl. Total Hole TBG-CSG-D.P. TBG-CSG-D.P. Collar Depths Depth Size Depth Shoe Size % Excess Depth Size WGT Type Wgt Type Float 8 5/8" 12 1/4" 24# 265' 262' Pkr - Cmt Ret - Br Pl - Liner Perf Depth Well Fluid Last Casing Top Conn WGT Depth Brand & Type Btm Depth Top Size Thread Csg. Type WGT Type H<sub>2</sub>o 8.33 Cal Displ Vol - 15 BBLS Max Tbg Max Csg PSI Cal Psi Cal **OP Max** Displ Fluid Water **PSI** 1000 PSI Max Psi TBG CSG CSG Total To Rev SQ PSI Rated OP OP WGT Bump Plug Rate Туре Source H2o 8.33 Explanation: 20 BBLS CMT. TO PIT. Pressure/Rate Detail Explanation Pressure - PSI Bbl Fluid Fluid Time Rate Safety Meeting: Crew x Co. Rep x HR:Min Pumped Pipe Annulus **BPM** Type **Testing Lines** Psi 1000 Circulating-Well-Rig 1000 70 3.0 10 H<sub>2</sub>0 PUMP WATER W/ DYE 1003 40 2.5 30 CMT PUMP CEMENT @ 15.5 PPG 1020 120 3.0 15 H<sub>2</sub>0 PUMP DISPLACEMENT 1025 85 ISIP RECEIVED RELEASED JUN 1 4 2004 FROM CONFIDENTIAL KCC WICHITA Bumped PSI to Test Float Bbl CMT Total PSI Spot Plug Bump Equip Returns/ Bbl Left Тор Serv. Supv. Plug Reversed Pumped On Cement CSG N/A N/A Ν 20 bbl 55 85 Υ Ray Decker

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