

CONFIDENTIAL

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

ORIGINAL

Form ACO-1
September 1999
Form Must Be Typed

1/25/12

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

Operator: License # 5363
Name: Berexco Inc.
Address: P. O. Box 20380
City/State/Zip: Wichita, KS 67208
Purchaser: Central Crude Corporation **KCC**
Operator Contact Person: Evan Mayhew **JAN 25 2010**
Phone: (316) 265-3311 **CONFIDENTIAL**
Contractor: Name: Beredco Inc.
License: 5147
Wellsite Geologist: Bryan Bynog

Designate Type of Completion:
 New Well Re-Entry Workover
 Oil SWD SLOW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, etc)

If Workover/Re-entry: Old Well Info as follows:

Operator: _____
Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____
 Deepening Re-perf. Conv. to Enhr./SWD
 Plug Back _____ Plug Back Total Depth _____
 Commingled _____ Docket No. _____
 Dual Completion _____ Docket No. _____
 Other (SWD or Enhr.?) _____ Docket No. _____

06 Oct. 2009 28 Oct. 2009 29 Dec. 2009
Spud Date or Date Reached TD Completion Date or
Recompletion Date Recompletion Date

API No. 15 - 189-22687-00-00
County: Stevens

SW NE SE NW Sec. 1 Twp. 31 S. R. 35 East West
1970 feet from S / N (circle one) Line of Section
2304 feet from E / NW (circle one) Line of Section

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

Lease Name: Blackstone Well #: 1-1
Field Name: Cutter Field

Producing Formation: Chester Sand
Elevation: Ground: 2931' Kelly Bushing: 2940'

Total Depth: 5760' Plug Back Total Depth: 5719'

Amount of Surface Pipe Set and Cemented at 1715 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set 3211 Feet

If Alternate II completion, cement circulated from _____
feet depth to _____ w/ _____ ^{sq cmt.} AH1-Dlg-2/3/10

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content 5,500 ppm Fluid volume 6,000 bbls

Dewatering method used evaporation

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License No.: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Docket No.: _____

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, 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 of 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: Richard R. Smith

Title: ENGINEERING TECHNICIAN Date: 22/JAN/2010

Subscribed and sworn to before me this 22 day of Jan 2010.

Notary Public: Diana E Bell

Date Commission Expires: July 10, 2011

DIANA E. BELL
Notary Public - State of Kansas
My Appt. Expires 8-10-11

KCC Office Use ONLY

Letter of Confidentiality Attached

If Denied, Yes Date: _____

Wireline Log Received

Geologist Report Received

UIC Distribution

RECEIVED
JAN 26 2010

KCC WICHITA

Operator Name: Berexco Inc. Lease Name: Blackstone Well #: 1-1 JAN 25 2010
 Sec. 1 Twp. 31 S. R. 35 East West County: Stevens CONFIDENTIAL

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 copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Submit Copy)</i> List All E. Logs Run: Dual Induction Log, Dual Compensated Porosity Log, Borehole Compensated Sonic Log & Microresistivity Logs (e-mailed to: kcc-well-logs@kcc.ks.gov.)	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Name</th> <th style="text-align: left;">Top</th> <th style="text-align: left;">Datum</th> </tr> </thead> <tbody> <tr> <td>Heebner</td> <td>3980'</td> <td>(-1040')</td> </tr> <tr> <td>Lansing</td> <td>4058'</td> <td>(-1118')</td> </tr> <tr> <td>Kansas City (top)</td> <td>4546'</td> <td>(-1606')</td> </tr> <tr> <td>Marmaton</td> <td>4706'</td> <td>(-1766')</td> </tr> <tr> <td>Morrow sand</td> <td>52740'</td> <td>(-2334')</td> </tr> </tbody> </table>	Name	Top	Datum	Heebner	3980'	(-1040')	Lansing	4058'	(-1118')	Kansas City (top)	4546'	(-1606')	Marmaton	4706'	(-1766')	Morrow sand	52740'	(-2334')
Name	Top	Datum																	
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Kansas City (top)	4546'	(-1606')																	
Marmaton	4706'	(-1766')																	
Morrow sand	52740'	(-2334')																	

CASING RECORD <input checked="" 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
conductor	32"	20"		119'	Grout	15.5 yard	
surface	12 1/4"	8 5/8"	24#	1715'	60/40 POZ	500	6% gel, 3% cc
(see add'l. sheet)					Class A	150	3% cc

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				RECEIVED JAN 26 2010 KCC WICHITA

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
4 SPF	5568' - 5579' (Chester Sand)	1200 gals 7-1/2% MCA & 60 balls	5568'-79'
		19500 gals gelled 2% KCL wtr &	
		18000 # 20/40 Sand	

TUBING RECORD	Size	Set At	Packer At	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	2 7/8"	SN @ 5630'	no pkr	

Date of First, Resumed Production, SWD or Enhr. 29 December, 2009	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.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	33	none	47	no gas	35° API

Disposition of Gas	METHOD OF COMPLETION	Production Interval
<input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Sumit ACO-18.)</i>	<input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <input type="checkbox"/> Other (Specify)	5568' - 5579'

Side Two ~~Two~~ ^{Three}

Operator Name: Berexco Inc. Lease Name: Blackstone Well #: 1-1
Sec. 1 Twp. 31 S. R. 35 East West County: Stevens

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 copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken Yes No
(Attach Additional Sheets)

Samples Sent to Geological Survey Yes No

Cores Taken Yes No

Electric Log Run Yes No
(Submit Copy)

List All E. Logs Run:

(Refer to previous sheet for list of logs run).

Log Formation (Top), Depth and Datum Sample

Name Top Datum

(Refer to previous sheet for Formation Tops).

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CASING RECORD <input checked="" 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
Production	7 7/8"	5 1/2"	15.5#	5766'	60/40 POZ	50	8%gel1/4#flakes
					ASC	325	2%gel6#Gils10%
DV Tool				3211'	60/40&Comr	325 & 50	8%gel1/4#flakes

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> 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
	(Refer to previous sheet for perf & completion record - completed 29 December 2009).		

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TUBING RECORD	Size	Set At	Packer At	Liner Run <input type="checkbox"/> Yes <input type="checkbox"/> No

Date of First, Resumed Production, SWD or Enhr.	Producing Method <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)
Estimated Production Per 24 Hours	Oil Bbls. Gas Mcf Water Bbls. Gas-Oil Ratio Gravity

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

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

Production Interval

BEREXCO INC.

25 January, 2010

Kansas Corporation commission
Oil & Gas Conservation Division
Wichita State Office Building
130 South Market, Room 2078
Wichita, KS 67202-3802

KCC
JAN 25 2010
CONFIDENTIAL

RECEIVED
JAN 26 2010
KCC WICHITA

RE: Blackstone #1-1
Sec 1-T31S-R35W (1970' fnl, 2304' fwl)
Stevens County, Kansas
API # 15-189-22687-00-00

Gentlemen:

Please find enclosed the original and two copies of the Well Completion Form ACO-1, one copy each of the Geologists Report, cementing tickets, Drill Stem Test Reports and Lithology Strip Log for the above referenced well.

Electronic copies of all the open hole logs run have been e-mailed to: kcc-well-logs@kcc.ks.gov as per rule 82-3-107(d)(J). Please hold all information **CONFIDENTIAL** for the maximum time allowed.

Thank you for your attention to this matter.

Sincerely,



Richard Smith
Engineering Technician
(316) 337-8334
(316) 265-2994 (fax)
rsmith@berexco.com

Enclosures

cc: Charles Spradlin
Well File

ALLIED CEMENTING CO., LLC. 044317

KCC

JAN 25 2010

CONFIDENTIAL

SERVICE POINT:

Oakley, KY

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SWNE SENW

DATE 10/7/09	SEC. 1	TWP. 31	RANGE 35	CALLED OUT	ON LOCATION 1:30pm	JOB START 7:30pm	JOB FINISH 8:30pm
LEASE Blackstone	WELL # 1-1	LOCATION SaTanTg w TO STEVENSON CO LINE			COUNTY STEVENSON	STATE KS	
OLD OR NEW (Circle one)		NEW 1W 3/4W WTR TO					

CONTRACTOR Beraco OWNER Sam

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D. 17

CASING SIZE 8 5/8 DEPTH 1723'

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT 42.55

CEMENT LEFT IN CSG. 42.55

PERFS.

DISPLACEMENT

CEMENT
AMOUNT ORDERED 500 SKS ALW 370CC
150 SKS Com 370 C.C.

COMMON	<u>150 SKS</u>	@	<u>15.45</u>	<u>2317.50</u>
POZMIX		@		
GEL	<u>3</u>	@	<u>20.80</u>	<u>62.40</u>
CHLORIDE	<u>19</u>	@	<u>58.20</u>	<u>1105.80</u>
ASC		@		
	<u>ALW 500SKS</u>	@	<u>14.05</u>	<u>7025.00</u>
	<u>Flo Seal 125 lb</u>	@	<u>2.50</u>	<u>312.50</u>
		@		
		@		
		@		
HANDLING	<u>325</u>	@	<u>2.40</u>	<u>780.00</u>
MILEAGE	<u>100.5K/mile</u>			<u>1950.00</u>
RECEIVED				<u>TOTAL 13563.20</u>

EQUIPMENT

PUMP TRUCK CEMENTER Alan

422 HELPER Wayne

BULK TRUCK

456 DRIVER Wayne

BULK TRUCK

449 DRIVER Alvin

REMARKS:

Cement did Circulate

Thank You

Alan, Wayne, Wayne

Alvin

CHARGE TO: Beraco Inc

STREET _____

CITY _____ STATE _____ ZIP _____

SERVICE

KCC WICHITA

DEPTH OF JOB 1723'

PUMP TRUCK CHARGE 1018.00

EXTRA FOOTAGE @ _____

MILEAGE 30 @ 7.00 210.00

MANIFOLD @ _____

TOTAL 1228.00

PLUG & FLOAT EQUIPMENT

Conide shoe	1	@		<u>250.00</u>
Insert	1	@		<u>160.00</u>
Centralizer	3	@	<u>45.00</u>	<u>135.00</u>
Basket	1	@		<u>160.00</u>
Plug	1	@		<u>110.00</u>
TOTAL				<u>820.00</u>

To Allied Cementing Co., LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any) _____

TOTAL CHARGES _____

DISCOUNT _____ IF PAID IN 30 DAYS

PRINTED NAME Gilbert Davila Jr

SIGNATURE [Signature]

Bid

ALLIED CEMENTING CO., LLC. 044395

KCC

JAN 25 2010

SERVICE POINT:

OAKLEY KS

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

CONFIDENTIAL

10-28-09	SEC. 1	TWP. 31	RANGE 35	CALLED OUT	ON LOCATION 1:00pm	JOB START 11:00am	JOB FINISH 12:00am
Blackstone LEASE	WELL# 1-1	LOCATION Sadanta w. center			COUNTY Stevens	STATE KS	
OLD OR <u>NEW</u> (Circle one)			1w-31w-wgn				

CONTRACTOR Beredco

TYPE OF JOB 2-stage

HOLE SIZE 7 7/8 T.D. 5760'

CASING SIZE 5 1/2 S.S DEPTH 5755'

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DU Tool #60 DEPTH 3206'

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT 42 1/2

CEMENT LEFT IN CSG. 42 1/2

PERFS.

DISPLACEMENT 135.96 BBLs

OWNER

CEMENT

AMOUNT ORDERED (Bot) 325 SK ASC 290500

1090 SK 1 1/2" G.I. SK #129, CD-31-50 LITE

Top 350 LITE 1 1/2" G.I. SK - 50 COM WGT

COMMON	50	@ 15 45	772 50
POZMIX		@	
GEL		@	
CHLORIDE		@	
ASC	325	@ 18 00	6045 00
LITE	400 SK	@ 14 05	5620 00
	1950	@	
G.I. SK LITE		@ 18 9	1735 00
		@	
Closeal	100	@ 2 50	250 00
		@	
CD-31	153	@ 9 35	1430 55
		@	
HANDLING		@	2850 00
MILEAGE	104 SK mile		3875 00
TOTAL			22578 55

EQUIPMENT

PUMP TRUCK CEMENTER Terry

431 HELPER Kelly

BULK TRUCK

396 DRIVER Andrew

BULK TRUCK

373 DRIVER Terry

377 LABONE

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REMARKS:

Mix 50 SK LITE 1 1/2" Closeal Tail with 325 SK ASC 290500
wash out pump lines. Displace plus to
Latchedown. 100* lift 1500* land closed
Drop DU Bore with 15 min open tool @ 1200'
circ 4 hrs. mix 10 SK S.S. W.H. - 15 SK S.S. R.H.
mix 325 LITE 1 1/2" Closeal Tail with 50 SK WGT
wash out pump lines. Displace plus
to DU Tool 1000* lift 1700* land close tool
plus down @ 11:50pm cemented and circulate
3 BBLs

SERVICE

DEPTH OF JOB 5755'

PUMP TRUCK CHARGE 2011 00

EXTRA FOOTAGE @

MILEAGE 30 @ 7 00 210 00

MANIFOLD @

CHARGE TO: Beredco Inc

STREET _____

CITY _____ STATE _____ ZIP _____

THANKS Kozick crew

TOTAL 2221 00

PLUG & FLOAT EQUIPMENT

5 1/2

1. AFD float shoe			214 00
24. Cent (L)	@ 46 00		1104 00
4. Baskets (L)	@ 231 00		924 00
1. DU Tool	@		2268 00
1. loc pins	@ 32 00		32 00
TOTAL			4542 00

To Allied Cementing Co., LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any) _____

TOTAL CHARGES _____

DISCOUNT _____ IF PAID IN 30 DAYS

PRINTED NAME _____

SIGNATURE [Signature]

Koda Services, Inc.

OCT 0 2009 **INVOICE**

Conductor and Rat Hole Drilling, Landfill Gas Drilling and Well Construction Nationwide

Date	Invoice #
10/2/2009	7983

Bill To
Berexco, Inc. P O Box 20380 Wichita, KS 67208

WF

PAID
JAN 25 2010
COMMERCIAL

Ordered By	Terms	Field Tkt	Legal Description	Lease Name	Drill Rig
Greg	Net 30	5305	Sec. 1-31-35	Blackstone #1	

Item	Quantity	Description
Conductor	119	Drilled 119' of 32" hole for conductor
20" Pipe	119	Furnished 119' of 20" conductor pipe
Conductor		Ream Hole
72" X 6'	1	Furnished 6' X 6' tinhorn
Dirt Removal		Provided Labor and Equipment for dirt removal and cleanup
Mud/Water		Freight/Trucking charge for mud/water
Welder		Welder
Grout		Furnished grout
Deliver Grout		Deliver grout to location
Cover Plate	1	Cover Plate

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Subtotal	\$13,680.00
Sales Tax (5.3%)	\$308.20

Thank you for your business.	Total	\$13,988.20
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**BEREXCO, INC.
BLACKSTONE # 1
SWNESENW SECTION 1 T31S-R35W
STEVENS COUNTY, KANSAS**

KCC
JAN 25 2010
COMPLETED

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JAN 26 2010
KCC WICHITA

**GEOLOGIST
WILLIAM B. BYNOG**

FORMATION TOPS

FORMATION	DEPTH (LOGS)
STONE CORRAL	
HEEBNER	3980(-1040)
TORONTO	
LANSING A	4058(-1118)
B ZONE	4096(-1156)
C ZONE	4126(-1186)
D ZONE	4178(-1238)
E ZONE	
F ZONE	
G ZONE	4344(-1404)
STARK	
H ZONE	4370(-1430)
I ZONE	4440(-1500)
KANSAS CITY A	4546(-1606)
KANSAS CITY B	4602(-1662)
KANSAS CITY C	
BKC	
MARMATON	4706(-1766)
B ZONE	4750(-1810)
NOVINGER	
PAWNEE	4842(-1902)
FORT SCOTT	4888(-1948)
CHEROKEE	4910(-1970)
BASAL CHEROKEE	5156(-2216)
ATOKA	
MORROW SHALE	5250(-2310)
MORROW SAND	5274(-2334)
LOWER MORROW	5344(-2404)
CHESTER	5498(-2558)
CHESTER POROSITY	5566(-2626)
SAINT LOUIS	5660(-2720)

BLACKSTONE #1

BEREDCO RIG 10 7 7/8 HOLE

BLACKSTONE #1 SAMPLE DESCRIPTIONS

3700-60 LIMESTONE pale gray,hard,dense, slightly chalky,tight

3760-3830 LIMESTONE pale gray,slightly hard,very chalky,no shows

3830-70 LIMESTONE Pale gray,hard,fossils, fair fossils porosity,no shows

3870-3900 LIMESTONE as above becoming chalky, abundant chert white,orange

3900-50 POOR SAMPLES, TIGHT HOLE

3950-50 LIMESTONE gray,firm,fossils,slightly chalky,fair porosity,no shows

3950-60 SHALE black,green,rounded,carb

3960-70 LIMESTONE as above

3970-90 SHALE green,black,firm,fissile,very carbonaceous

POOR SAMPLES

3990-4005 LIMESTONE tan,brown,very hard,dense, cprxl n

4005-20 SHALE black,firm,fissile,very carbonaceous

4020-4090 LIMESTONE brown,very hard,dense, fossils,poor porosity,no shows/ abundant
SHALE as above

BLACKSTONE #1

VERY POOR SAMPLES, ABUNDANT CAVINGS

LAN A 4062(- 1122) 4058 (- 1108) LOG

4090-4100 LIMESTONE gray brown,hard,dense

LANS B 4096(-1156) 4096(-1156) LOG

4100-10 Dolomite buff,hard,micxln, fossils,poor to fair micro vuggy porosity,
nsfoc,good odor

4110-20 LIMESTONE gray brown,very hard,dense/ thin interbedded SHALE
rounded,green,some black as above

4120-30 Dolomite/LIMESTONE buff,slightly hard, micxln,slightly fossils,poor micxln
porosity,some poor to trace fair vuggy porosity,slightly chalky,nsfoc,faint odor

4130-40 LIMESTONE gray brown, hard, crplx

4140-50 LIMESTONE/GRNSTN brown,firm,very oolitic,good oomoldic porosity, dull yell
flour,no cut,no odor

4150-70 LIMESTONE gray brown,hard,fossils, oolitic,good oomoldic porosity,no shows

4170-80 LIMESTONE gray,hard,very fnly crystalline,poor porosity,no shows

LANS D 4178(- 1238) 4178(-1238) LOG

4180-4200 LIMESTONE gray,slightly hard,very fossils,slightly chalky,abundant
calcite crystals,good moldic porosity,no shows

4200-10 LIMESTONE gray,slightly hard,fossils, oolitic,fair to good moldic
porosity,no shows

BLACKSTONE #1

421-20 LIMESTONE gray,hard,micxln, chalky,no shows

4220-30 LIMESTONE gray,gray brown,slightly hard, very fossils,oolitic,good moldic porosity,no shows

4230-70 LIMESTONE gray,hard,finely crystalline, chalky,no shows

4270-80 LIMESTONE brown,very hard,dense

4280-4310 LIMESTONE gray,pale gray brown,hard,micxln, fossils,chalky,poor porosity,v abundant Chert white,gray

4310-45 LIMESTONE tan,very hard,dense, some Chert white

G 4345(- 1405)

4344(- 1404)

4345-60 LIMESTONE/GRNSTN light brown,hard,very oolitic,good to very good oomoldic porosity,no shows

4360-80 LIMESTONE gray brown,very hard,dense

4380-90 LIMESTONE brown,hard,very oolitic,gd oomoldic porosity,nsfoc

4390-95 SHALE green,sme black,firm, carbonaceous

4395-4425 LIMESTONE light gray,very hard,dense

4425-35 LIMESTONE light brown,hard,very oolitic,good moldic porosity,nsfoc

4435-40 LIMESTONE brown,very hard,dense

4440-50 LIMESTONE gray brown,firm,slightly oolitic,slightly chalky,poor to fair micro vuggy porosity,some good moldic porosity,spotty to even stain,very good cut and even bright yellow fluor and odor

BLACKSTONE #1

4450-80 LIMESTONE pale gray,firm,very chalky,/ thin interbed LIMESTONE gray brown,very hard,dense

4480-4530 LIMESTONE gray brown,very hard,very dense, crpxln,very blocky

4520-40 SHALE dark gray,black,hard,very carbonaceous

4540-60 LIMESTONE gray brown,very hard,very dense,crpxln

4560-75 LIMESTONE/GRNSTN tan,light brown,firm,very oolitic,very good oomoldic porosity,spotty stain,bright yellow fluor,good cut and odor

4575-85 SHALE rounded,green black,firm,slightly carbonaceous

4585-90 LIMESTONE gray brown,very hard,very dense,crpxln

4590-4600 SHALE black,dark gray,hard, carbonaceous

4600-15 LIMESTONE gray brown,very hard,very dense,crpxln

4615-20 LIMESTONE gray,hard,slightly oolitic, poor vuggy porosity,very spotty stain,poor cut,faint odor

4620-25 LIMESTONE gray brown,very hard,very dense,crpxln

4625-30 LIMESTONE gray,firm,chalky,slightly oolitic,poor porosity,nsfoc

4630-4700 LIMESTONE gray brown,very hard,very dense, crpxln,some pyrite crystals/ thin interbed SHALE green,black,slightly carbonaceous

4700-07 LIMESTONE brown,slightly hard,oolitic, fair oomoldic porosity,very spotty stain, dull yell fluor,weak residue cut

BLACKSTONE #1

4707-15 LIMESTONE brown,very hard,dense

4715-30 LIMESTONE/GRNSTN tan,firm, very oolitic,good moldic porosity,dull yell fluor,very spotty stain,weak residue cut

4730-50 LIMESTONE gray,tan,very hard,dense,slightly chalky,crpxln

4750-60 LIMESTONE/GRAINSTONE light brown,firm,very oolitic,very good oomoldic porosity,even light brown stain and bright yell fluor.very good cut, very strong odor

4760-4800 LIMESTONE tan,gray,very hard,dense

4800-20 SHALE dark gray,black,green,hard,slightly carbonaceous

4820-30 LIMESTONE gray,hard,dense

4830-50 SHALE dark gray,green,black, hard,slightly carbonaceous,blocky

4850-55 LIMESTONE gray brown,hard,dense, abundant pyrite nod

4855-60 LIMESTONE buff,firm,micxln, slightly chalky,slightly fossils,poor to fair micro vuggy porosity,nsfoc

4860-85 LIMESTONE gray,gray brown,very hard,dense,slightly chalky,trace chert gray

4885-90 SHALE dark gray,brown,black,slightly carbonaceous

4890-95 LIMESTONE light gray,firm,very fossils, slightly chlky,micxln,fair micro vuggy porosity,bright yell fluor,no stain,weak residue cut

4895-10 LIMESTONE buff,gray,hard,dense

CHER 4910(-1970)

4914(- 1974) log

BLACKSTONE #1

4910-15 SHALE black, firm, carbonaceous

4920-70 LIMESTONE dark gray, gray brown, very hard, dense, shaly / interbed SHALE dark gray black, black, carbonaceous

4970-80 SHALE dark gray black, black, hard, carbonaceous

4980-5020 LIMESTONE and SHALE as above

5020-80 LIMESTONE gray brown, very hard, dense, crpxln

5080-90 SHALE dark gray, black, hard, carbonaceous / thin interbed LIMESTONE as above

5090-5140 SHALE dark gray black, black, hard, carbonaceous / thin interbed LIMESTONE brown, very hard, dense, shaly

5140-50 LIMESTONE gray, hard, slightly chalky, dense

5150-55 LIMESTONE buff, firm, fossils, micxln, poor to fair vuggy porosity, spotty stain, yell fluor, good cut, fair odor

5155-70 LIMESTONE brown, very hard, dense, crpxln

5170-5240 interbed LIMESTONE and SHALE as above

5240-50 SHALE black, firm to hard, carbonaceous

5252-70 SHALE / SILTSTONE pale gray, firm, argillaceous, abundant fossils fragment, calcareous, weak residue cut

5270-80 SANDSTONE smoky, light brown, hard, coarse grained, very angular, poorly sorted, well cement, calcareous, poor porosity, dull yell fluor, poor residue cut, no odor

BLACKSTONE #1

5270-5300 SHALE medium gray,firm,fi ssile, argillaceous

5300-30 SHALE gray,green,firm,fi ssile

5330- 40 SHALE as above some scattered SANDSTONE brown,hard,coarse grain,angular,poor sorted,glauc onite ,calcareous cement,poor to trace fair intxln porosity,
very spotty stain,dull yell fluor,poor cut

5340-50 SANDSTONE brown,hard,cgr,angular,poorly sorted, glauc onite,calcareous cement,poor to fair poor to poor intergranular porosity,spotty stain,dull yell fluor, fair cut,faint odor

5350-60 SHALE gray,firm,fi ssile

5360-65 SANDSTONE gray,firm,fine grain,clay fled,poor porosity,no shows

5365-5400 SHALE dark gray,gray black. hard,carbonaceous/ thin interbed LIMESTONE dark gray ,very hard,dense

5400-30 LIMESTONE gray,hard,very fossils,slightly glauc onite,poor porosity,shaly,sandy

5430-70 SHALE gray black,gray,hard,carbonaceous / thin interbed LIMESTONE as above

5460-95 LIMESTONE pale gray,very hard,dense, crpxln,slightly chalky

5495-5500 SHALE gray,firm,fi ssile

5500-10 LIMESTONE gray,hard,slightly chalky, dense

5510-30 SHALE light gray,firm,fi ssile, waxy

5530-40 LIMESTONE pale gray,very hard,dense, slightly chalky,sme chert white

BLACKSTONE #1

5540-50 LIMESTONE gray brown,hard,slightly chalky,slightly sandy,very fine to fine grain,very poor porosity, no shows

5550-65 LIMESTONE gray brown,very hard,dense, crpxln

5565-80 SANDSTONE translucent to light brown,friable, fine to medium,sub rounded,medium sorted,fair intergranular porosity,spotty stain,good cut and odor, show free oil

5580-90 LIMESTONE gray brown,hard,chalky, sandy, fine grain,no shows

5590-5620 SANDSTONE gray,firm,very fine to fine grain, salt and pepper,clay filled,calcareous,no vis porosity,no shows

5620-35 LIMESTONE white,firm,very chalky, sandy

5635-60 SANDSTONE white,friable,fine to medium grain,sub rounded, well sorted,clay filled,fair porosity,no shows

5660-75 LIMESTONE white,buff,very hard,slightly chalky,abundant Chert white,gray

5675-80 LIMESTONE buff,firm,very chalky,poor porosity,no shows, abundant Chert white,gray

5680-5700 LIMESTONE buff,light tan,very hard,dense,crpxln

5700-10 LIMESTONE white,firm,very chalky,very slightly oolitic,no shows

5710-60 LIMESTONE white,,hard,dense,very finely crystalline,slightly chalky

RTD 5760

LTD 5767