

VEU
FILE

COMPANY **BEREXCO**
 LEASE Arnold W NO. 1-1
 LOCATION 335' FSL + 1400' FWL
 SEC. TWP. 29S RNG. 41W
 COUNTY Stanton STATE Kansas
 FIELD Arroyo Northeast

ELEVATIONS
 KB 3353
 DF 3351
 GL 3341

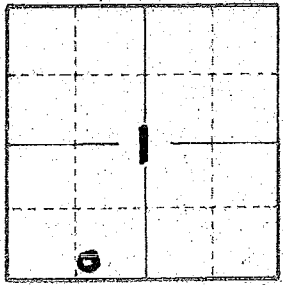
MEASUREMENTS ARE
 ALL FROM KB

CONTRACTOR Berexco Drilling Rig #1
 COMM. 5-27-2015 COMP. 6-12-2015
 RTD 5691 LTD 5653
 No. of DST'S 1 No. of CORES None

CASING RECORD
8 3/8" at 1701 w/ 795 SX.
 ___ at ___ w/ ___ SX.
 ___ at ___ w/ ___ SX.
 ___ at ___ w/ ___ SX.
 EL. LOG A.C.T. Res. SP-GR
DEN-NEUT-GR-Caliper
ML-Sonic

SAMPLES SAVED FROM 3600 TO TD
 DRILLING TIME KEPT FROM 3600 TO TD
 SAMPLES EXAMINED FROM 3600 TO TD
 GEOLOGICAL SUPERVISION FROM 3600 TO TD
 GEOLOGIST ON WELL Edwin H. Grieves

FORMATION TOPS	SAMPLE	LOG	SUBSEA
<u>Base Heebner</u>	<u>3749</u>	<u>3710</u>	<u>- 357</u>
<u>Lansing Fm.</u>	<u>3816</u>	<u>3765</u>	<u>- 412</u>
<u>Kansas City "A"</u>	<u>4232</u>	<u>4190</u>	<u>- 837</u>
<u>BKC</u>	<u>4379</u>	<u>4335</u>	<u>- 982</u>
<u>Marmaton Fm</u>	<u>4400</u>	<u>4366</u>	<u>- 1013</u>
<u>Ft Scott</u>	<u>4569</u>	<u>4531</u>	<u>- 1178</u>
<u>Morrow Fm</u>	<u>5066</u>	<u>5033</u>	<u>- 1680</u>
<u>Chester</u>	<u>5550</u>	<u>5506</u>	<u>- 2153</u>
<u>St. Genevieve</u>	<u>5614</u>	<u>5568</u>	<u>- 2215</u>
<u>St. Louis</u>	<u>5665</u>	<u>5618</u>	<u>- 2265</u>
<u>TD</u>	<u>5691</u>	<u>5653</u>	

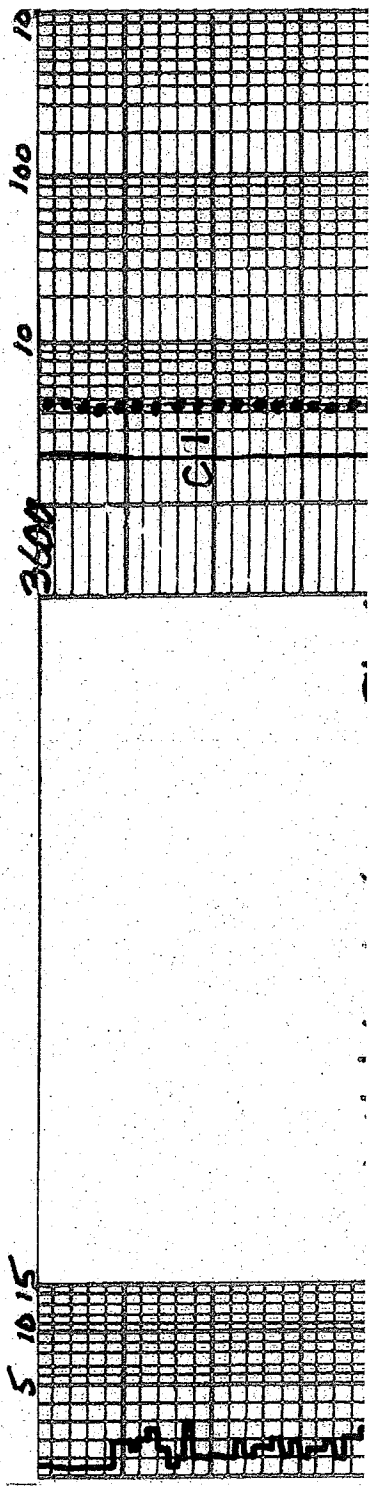


API# 15-187-21321

REMARKS Earth-Tech had an unmanned gas detection trailer on this well from 3600 feet to total depth.

Note: E-log Depths are 36 to 38 feet high to Sample Log Depths.

*Edwin H. Grieves
 Ed H. Grieves
 Ed H. Grieves
 Ed H. Grieves*



Interbedded Lmsts w/ scattered chert
① Slower Dalg. Lms. H. gray. grading to tan
crypto to v. v. tan. xln.; tes. sub-chlk
sub-sucro & ph. chert; tes. to zbn
w/ ph. autom. gdl. tes. to oolitic IP's;
dub. H. yellow. to dub. yellow. fluor.; No cut.

② Faster Dalg. Lms. tes. to zbn. wht to
crm. chlk & grayish. tan to tan;
crypto to v. v. tan. xln.; sub-chlk;
sub-sucro. to sucro. idub. yellow.
dub. H. yellow. fluor.; No cut; abn. pr. to
fx. & tes. gd. to excel. micro-pp. to
interm. por.

③ Scattered tes chert cam. to
tan; opaque

3700

Braschebner
3749-396

Sh. v. del. gray. to black-carb.

Sh. H. gray. to H. green; mushy & soft when
wet; tes. silty

Lms. hyp. tes. wht to can. chlk & crypto
crypto. to v. v. tan. xln.; sub-chlk. sub-sucro
to tes. sucro. dub. yellow. fluor.; No cut
scattered tes. v. pr. micro-pp. por.

Lms. grayish. tan to tan; crypto to v. v. tan.
xln.; tes. sub-chlk. sub-sucro & ph. chert;
dub. yellow. fluor.; No cut; No vis. por.

3800

Sh. H. med. & tes. del. gray. - silty. var. calc.

Lausling "FM"
3816-463

Interbedded Limestones

① Slower Dalg. Lms. H. gray to tan;
crypto. to v. v. tan. xln.; tes. sub-chlk;
sub-sucro. ph. chert. & tes. sub-lithoge;
scattered tes. to tes. w/ ph. autom.
oolites to oolitic IP's. dub. H. yellow.
to H. yellow. fluor.; No cut; No vis. por.

② Faster Dalg. Lms. tes. to hyp. tes. wht.
to crm. chlk and grayish. tan to tan
crypto. to v. v. tan. xln.; sub-chlk;
sub-sucro to sucro. tes. to ss. IP's
scattered tes. ph. autom. oolitic
to oolitic IP's. dub. yellow. to dub. H. yellow.
fluor.; No cut. scattered tes.

(3) PASTERLING. LMS. TRSTO. NOZ. TRS. UNIT.
 To cAm - chalk and grayish. Tan to tan
 crypto. to uv. fn. xln. sub-chlk.
 sub-sucro to suco. - trs. foss. IP's
 scattered trs ph an. You oolitic
 to oolitic IP's, dw. yel. to dw. H. yel.
 Fluor. No cut scattered trs
 to hv. trs. P.R. to tk micro-pp. por
 w/ poss. interxln IP's

3900

WOB 3000
 RPM 65-70
 SPAM 60
 PP 1700

4000

Lms hv. tas to v. abn. wht. to cem-chalk
 and tan; crypto. to uv. fn xln. v.
 v. to extly oolitic por sl; tan
 oolitic; matrix trs. chlk, sub-sucro
 to suco + trs. p. acety. yel. to
 glau. yel. fluor. mottled IP's; No cut
 zbn. pr to excel oolitic por w/
 trs pr to tk micro-pp por. ext. redm

Lms. similar 4007-4039
 w/ less oolitic + more oolitic
 of por w/ corresponding reduction

Lms. tan to H. gray mottled IP's; crypto
 to uv. fn. xln. oolitic IP's; tan to fl.
 gray; sub-chlk, sub-sucro + packed
 dw. yel. fluor. IP's; No cut, No visibor
 becoming shly IP's w zbn sh. IP's
 med. to dw. gray, sl. to v. calc.

Cl

4100

WOB 3200
 RPM 340
 SPAM 75
 PP 80
 1000

Interbedded Limestones
 ① Slower Lms similar 4066-4176
 ② Faster Dabg Lms. hyp. has to abn w/lt. cam. chlk + tan; crypto. to v. v. xln; pol. in. spk. sl. oolitic IP's; sl. to v. foss. IP's; dul. yel. to yel. fluor.; No cut; hyp. has PR. to fl. 4-7es. gd. micro. Aptaer por.

Lms. similar 4066-4176

Lms. abn. wht. to cream-chlk + cream to tan; crypto. to v. v. xln; v. to ext. ly. oolitic; matrix oolitic; for v. to ext. ly. oolitic; matrix sub-chlky sub-sucro. to sucro. + pac. lth. yel. to dul. yel. fluor.; No cut; abn. CR to exel. oolitic; st. por. 4-7es. gd. to CR + TRsgd. micro - pp to inter. v. in. por. in matrix

Interbedded Limestones
 ① Lms. tan, grayish. IP's; crypto. to v. v. xln; sub-chlk.; sub-sucro + pac. lth. dul. H. yel. fluor. IP's; No cut; No Vis POR
 ② Lms. H. to med. gray. tanish IP's; sl. to v. shly inck. w/ depth; crypto. xln; sub-chlk. + pac. shly + pac. lth.; No fluor.; No cut; No Vis POR

Sh med to v. dark. gray - sl. to v. calc in parts

Lms. lg. gray to tan, crypto. to v. xln. sub-sucro., pac. lth. + st. sub-lithogr. dul. yel. fluor. IP's; No cut; No Vis POR

Kansas City 7A
 4292-879

WOB 38000
 RPM 70
 RPM 60
 RPM 1100

2441

17467

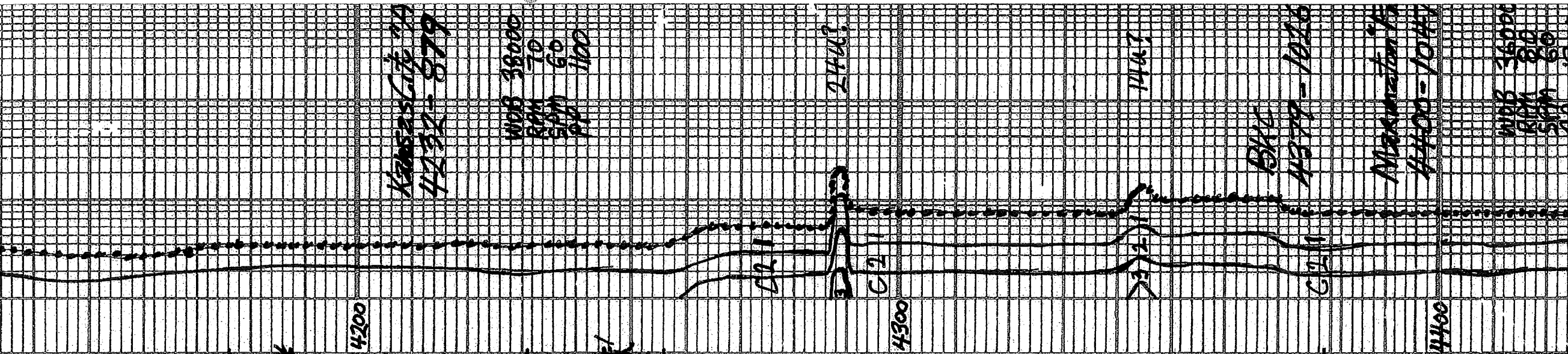
BK

4379-1026

Max. in. 17

4400-1047

WOB 36000
 RPM 80
 RPM 60



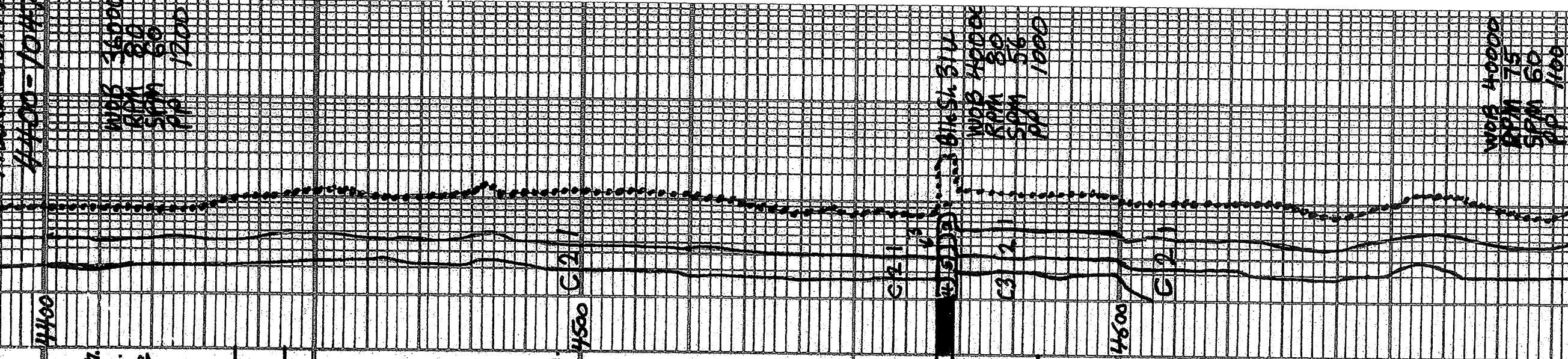
Lms. lt. gray to tan, crypto. to v. fine xln.
sub-sucroo, packets in str. sub-lithogr.
dal. yel. fluor. IP's; No Cut; No Vis. Por.

Lms. trs. whit. to cream - ch. l. k. tan
greyish. IP's crypto. to v. fine xln.
v. poorly to poorly crystalline
polycryst. m. x. TRIN. trs. sub-sucroo
packets; dal. yel. fluor. No Cut; trs
to h. y. trs poor to trs. fine. calcitic
Por.; Quest. Perin.

Lms. lt. to med. grey. - sl. to fully shly and
greyish. tan to tan, crypto. to v. fine xln.
sub-ch. k. fine shly & packets
phantom calcitic to calcitic IP's
trs. dal. yel. fluor.; No Cut; No Vis. Por.

— Sh. v. dk. grey. to black - carb.

Lms. similar 4445-4566



WOB 48000
RAM 80
SPM 75
PA 1000

WOB 40000
RAM 75
SPM 60
PA 1000

Interbedded Limestones and Shales

- ① Lms. sl. tns. wht. to cream. chlk. IP's + tan to grayish. tan; crypto. to w. fu. xln.; tns. sub-chlk; sub-sucra, packstr and tns. sub-lithogr; tns. to abn. phantom oolitic to tns. oolitic IP's; dub. yel. fluor; No cut; No vis. por
- ② Lms. lt. to drk. gray. - sl. to extly. shly. grading to highly calc. Shs.; crypto. to sub-chlk to r. shly; packstr. and sub-lithogr. v. scattered. tns. v. drk. yel. fluor; No cut No vis. por
- ③ Sh. med. to v. drk. gray. - sl. to extly. calc. grading to highly shly. Lmsts.
- ④ Scattered Shs. v. drk. gray. to black - carb.

4700

4800

4900

WGS 40000
RPM 75
SPM 60
PP 1100

WGS 40000
RPM 75
SPM 58
PP 1000

C2

C3

1

Lms. & Shs similar 4585-4967
Predominately Shs. v. drk. gray
to black carb.

Limestones w/ thin interbeds Shales

① Lms. H. to med. gray. sli. to extly shly
and hvy. tes. gray. sh. tan to tan, crypta
to v. fin. v. ln; sub-chalky or shly. tess. sub-
packstr. & tes. sub-lithogr.; No fluv. or k;
No cut; No vis. por

② scattered thin interbeds Shales
med. to v. drk. gray. - v. to extly. calc.
grading. to shly. Lmsts.

③ scattered thin interbeds Shales
v. drk. gray. to black-carb.

Lmsts w/ interbeds Shales similar
4996-5066 w/ large increase
in amount & thickness of
carb. black Shales

5119-5153 sh. tes. med. gray - soft
w/ silky luster IP's & drk to v. drk.
gray. to tes. black-carb.

5153-5156 Siltstn v. H. gray;
v. fin. to fin. gr. silt; scattered.
sli. tes. glauconitic chlorite
No fluv. or k. No cut; v. sl. tes
v. v. fin. micro-p. p. por. IP's

WOB 40000
RPM 75
SPM 60
PP 1100

Black Sh

Blk Sh

WOB 40000
RPM 70
SPM 54
PP 1000

More w/ thin
5066-1718

Shale

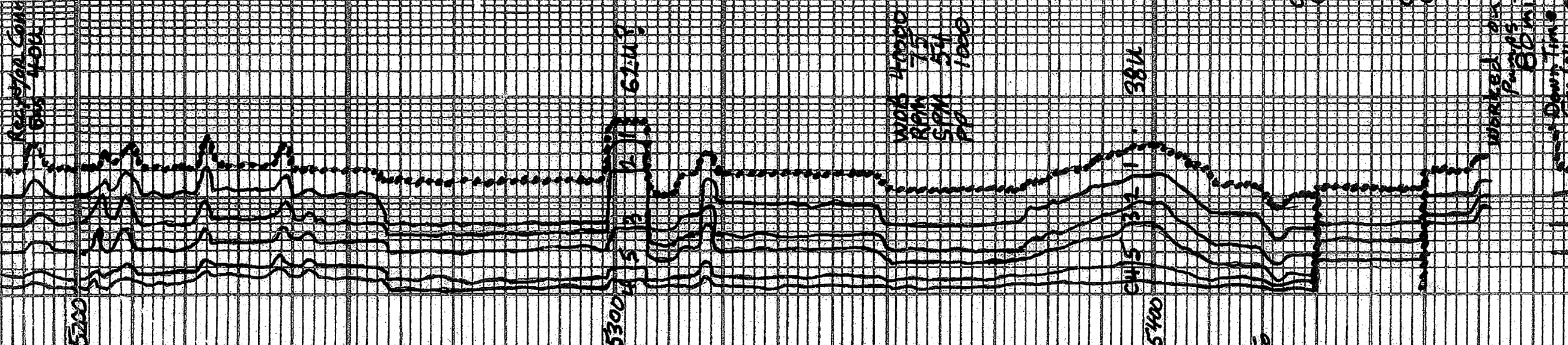
Blk Sh

Show 94

Recycle 4

Recycling Comp
500-400

5200



Revised for Comp
6/25/10

5200

5300

5400

Shs. trs. med. gray - soft w/silky luster; predominantly dark to v. dark gray splintery IP's trs. pyrite w/scattered trs. Lms. H. to med. gray to grayish tan to tan; crystals to v. v. fine. xln; trs. calcite (tan + gray); trs. foss.; sub. suoro.; packstr. to trs. sub-lithogr.; trs. dual. H. yel. fluor.; No cut; No vis. por.

62-149

Shs. med. gray - soft w/silky luster + dark gray - soft, splintery IP's w/trs. lm gas. becoming Lm. Sdst w/ gray sh. cement No fluor.; No cut; No vis. por.

width 4000
ROM 15
SON 54
PP 1000

Lm. Sdst. H. to med. gray; tanish IP's v. fine. to med. gray composed Lm gas, foss. frags. + calcite-gray (gas crystals to v. v. fine. xln); scattered trs. glauc +/or chlorite; matrix packstr. y Sh; trs. Qtz. gas. fine. to med. - 299; trs. dual. yel. fluor.; No cut; No vis. por.

CHS

381A

5481-5489 Sh. sl. to med. gray - soft w/silky luster and dark to v. dark gray - splintery IP's

5481-5489 Qtz + Lm Sdst 0-100 to 600 gas to 0 to 100% Lm gas. H. gas. to tan; v. v. fine. to fine. + trs. med. gr. Qtz gas 299; all pale; soft; Lm gas.

marked dis
Pumps
80m
Down Time

5481-5489 Qtz + Lm Sdst
 0-100% Qtz 90% to 0 to 100% Lm grs.
 H. gray to tan, v. v. to f. + tes med gr.
 Qtz grs ang, all prly sort; Lm grs
 composed Lm grs, fossil frags + tes
 oolites; matrix sub-chlk, packstone and
 hvy tes. Sh. i. tes to hvy tes. glauc.
 40% Chlorite IP's; silt. tes d. l. H. yel
 floor; No cut; No Vis Por

5489-5571 Sh. similar 5432-5481
 5571-5576 Qtz. sdst. li. tan from
 oil str. v. v. f. to f. w/ hvy tes med.
 gr. ang. prly sort. silt. med oil
 order; v. bat yel. fluor; flush to good
 staining cuts; abn. pr. fr. to good
 + hvy tes. Excel. micro. pp. to intergr.
 Pow; some loose Qtz grs, w/ h. to
 f. n. + tes med; ang. clear

5516-5529 Sh med. gray - soft w/ hvy
 lustered IP's + det. to v. dark. gray. splinter
 IP's w/ hvy tes Qtz sdst + matrix
 5411-5416 w/ scattered, tes sh grs
 med gray med gr. ang to rounded
 Sh med gray - soft w/ silt. hvy tes. s. det.
 to v. det. ang. splintered IP's

Sh + Lms Conglomerate
 ① Sh. Red + maroon silt. IP's
 (w/ abn med. to det. gray sh. prob. from)
 MORROW

② Lms. gray to tan, tes. pinkish crystals
 to v. v. f. in. sub-sucro; packstone
 + tes sub-litho; ang. yel. floor;
 No cut; No Vis Por

Sh + Lm conglomerate similar 5566-87
 w/ tes to abn. Lms. H. gray to tan, pinkish
 IP's, crystals to v. v. f. x. h. v. det. Ex. det.
 micro-oolitic + silt. Qtz sdst - v. large
 ang. matrix chlk, sub-chlk and
 sub-sucro; tes. v. det. yel. floor
 No cut; No Vis Por

Lms. H. gray to tan, crystals. to v. v. in. x. h.
 v. to extly micro-oolitic + Qtz sdst
 v. v. f. gr. ang. matrix sub-chlk
 sub-sucro + tes packstone;
 det. H. to tes. H. yel. floor; No cut
 No Vis Por.

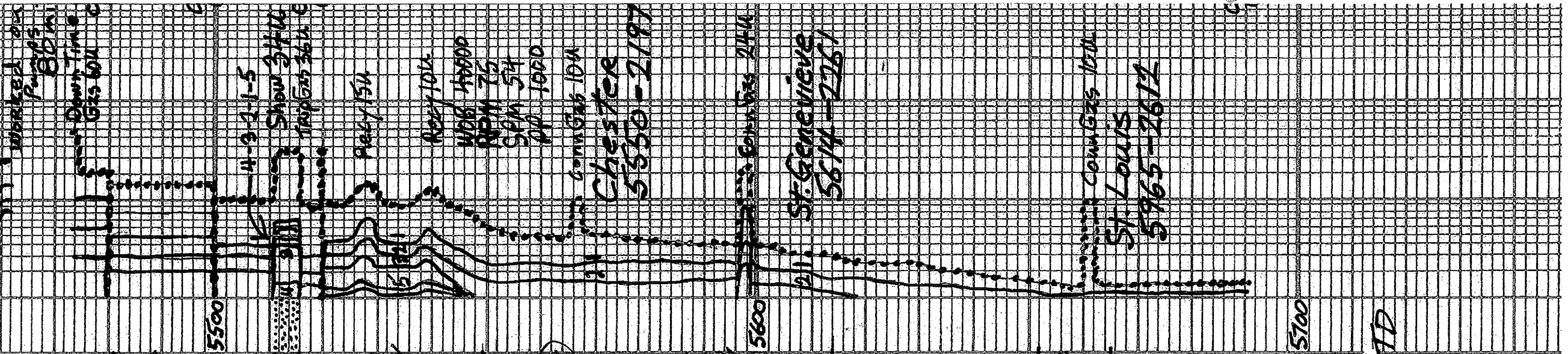
Lms. similar 5614-5652 w/ tes
 to abn wht. to com-chlk; micro-oolitic
 + Qtz. Sdy. w/ f. gr. - ang. w/ tes small
 to med. oolitic; det. H. yel. floor No cut
 No Vis Por

Lms. tes. to hvy. tes. wht to com-chlk + tan
 grayish. IP's, crystals. to v. v. in. v. v. to
 extly. oolitic (some med. to large) matrix
 chlk, sub-chlk, sub-sucro + packstone.
 det. H. yel. floor; No cut; No Vis Por.
 w/ tes to abn. chert gray, tan to amber
 + Kausi. to opp. w. c.

TD 5691

7 7/8" Bit In Poi

#	Dev. Suarv	in	out
1	New QT	GT25YG 1703	3312
2	New QT	GT25YG 3312	5520
3	Re-run Bit #1	5520	5691 TD
Dev. Suarv			
1.	502 1/4"	1	5430
2.	1000 1/4"	2	5450
3.	1703 1"	3	5480
4.	5489 5 1/4"	4	5500
5.	5691 10 7/8"	5	5520



- 3. 17031° 3 5480
- 4. 5489 5 5500
- 5. 56911° TD 5 5520

DST#1 MORROWSD 6 5691TD 5485-5520

10 Weak Surf. blow died Right way
 FO Weak Surf. blow died Right way
 Rec ± 2 feet

1st wtr? 99% Mud w/
 v. thin scum of oil

Tool Sample ± 100% Mud w/Tras
 wtr & some oil specks

IHP 2567 #

IFP 14-17# in 30 min

ISIP 21# in 60 min

FFP 16-16# in 30 min

FSIP 16# in 60 min

FHP 2534#

Daily Delq. Progress

- 1. 3600 6:51AM 6-4-15
- 2. 3611 7:00AM 6-4-15
- 3. 3962 7:00AM 6-5-15
- 4. 4327 7:00AM 6-6-15
- 5. 4708 7:00AM 6-7-15
- 6. 5048 7:00AM 6-8-15
- 7. 5480 7:00AM 6-9-15
- 8. 5520 7:00AM 6-10-15
- 9. 5599 7:00AM 6-11-15
- 10. 5691 7:00AM 6-12-15

Date	6-4 7:30A	6-5 9:35A	6-6 10:15A	6-7 10:15A	6-8 5:40P	6-9 11:10A	6-10 12:15P	6-11
Depth	3610	3997	4397	4760	5249	5774	5520	5691
WT	9.0	9.15	9.15	9.05	9.3	9.2	9.2	9.25
Vis	50	49	94	46	54	62	64	57
PV	16	15	24	14	17	18	19	17
YP	15	16	26	13	19	18	22	18
GS	1 1/35	1 1/34	1 1/59	1 1/37	1 1/52	1 1/53	1 1/56	1 1/51
WL	7.2	6.4	7.6	8.0	8.4	8.4	8.4	8.4
cake	1/32	1/32	1/32	1/32	1/32	1/32	1/32	1/32
pH	11.0	11.5	10.0	9.5	9.5	9.0	9.5	9.0
Chl	500	600	1400	1400	500	1100	700	500
Ca	20	20	60	20	20	40	40	20
LCM	5	5	4.5	18.0	19.0	15.5	14.5	12.0

IFP 14-17# in 30 min
 ISIP 21# in 60 min
 FFP 16-16# in 30 min
 ISIP 16# in 60 min
 FHP 2534#

Daily Orlg. Progress

1. 3600 6:51AM 6-4-15
2. 3611 7:00AM 6-4-15
3. 3962 7:00AM 6-5-15
4. 4327 7:00AM 6-6-15
5. 4708 7:00AM 6-7-15
6. 5048 7:00AM 6-8-15
7. 5490 7:00AM 6-9-15
8. 5520 7:00AM 6-10-15
9. 5599 7:00AM 6-11-15
10. 5691 7:00AM 6-12-15

Date	6-4 7:30A	6-5 9:35A	6-6 10:35A	6-7 10:35A	6-8 5:40P	6-9 10:30A	6-10 12:15P	6-11 11:30A
Depth	3610	3997	4399	4760	5249	5714	5520	5691
WT	9.0	9.15	9.15	9.05	9.3	9.2	9.2	9.2
Vis	50	49	94	46	54	62	64	57
PV	16	15	24	14	17	18	19	17
YP	15	16	26	13	19	18	22	18
GS	14 1/35	14 1/34	14 1/34	14 1/37	18 1/32	17 1/33	19 1/36	16 1/31
NL	7.2	6.4	7.6	8.0	8.4	8.4	8.4	8.4
Calc	1/32	1/32	1/32	1/32	1/32	1/32	1/32	1/32
pH	11.0	11.5	10.0	9.5	9.5	9.0	9.5	9.0
Chl	500	600	1400	1400	500	1100	700	500
Ca	20	20	60	20	20	40	40	20
LCM	5	5	4.5	18.0	13.0	15.5	14.5	12.0

OPERATOR Berexco LLC LOCATION 335'FSL + 1400'FWL
 LEASE Arnold, W NO. 1-1 TWP. 29S RNO. 41W
 ELEVATION 3353KB RTD 5691 COUNTY Stanton STATE Kansas