

DATE IN 8/11/06	SUSPENSE 8-31-06	ENGINEER MARK STOGNER	LOGGED IN 8/11/06	TYPE NSL	APP NO. PTD506223514TT
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
- Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

- [1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]
 [A] Location - Spacing Unit - Simultaneous Dedication
☒ NSL ☐ NSP ☐ SD
- Check One Only for [B] or [C]
 [B] Commingling - Storage - Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR
- [D] Other: Specify _____
- [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply
 [A] ☐ Working, Royalty or Overriding Royalty Interest Owners
- [B] ☐ Offset Operators, Leaseholders or Surface Owner
- [C] ☐ Application is One Which Requires Published Legal Notice
- [D] ☐ Notification and/or Concurrent Approval by BLM or SLO
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F] ☐ Waivers are Attached
- [3] **SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.**

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Print or Type Name	Signature	Title	Date
		e-mail Address	



**Southwestern Energy
Company**

2350 N. Sam Houston Parkway East
Suite 300
Houston, Texas 77032
(281) 618-4700 FAX: (281) 618-4818

2006 AUG 11 PM 1 03

August 10, 2006

Michael E. Stogner
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Dear Mr. Stogner:

Pursuant to Division Rule 104.F.(2), Southwestern Energy Production Company is requesting approval for of an unorthodox oil well location for the following well:

Well: Karlsbad Corral 11 Well No. 4-H
Location: 1340 feet FNL & 660 feet FEL
Well Unit: SE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 11, Township 25 South, Range 29 East,
N.M.P.M., Eddy County, New Mexico

The well will be drilled to test the Cherry Canyon 4 formation (Corral Fly, Delaware Pool). The pool is spaced on 40 acres, with wells to be located no closer than 330 feet to a quarter-quarter section line and for the subject well an exception to this 330' requirement is requested. A form C-102 is attached as Exhibit A.

The proposed location is based on engineering reasons. The proposed well, Karlsbad Corral 11 #4-H, will be directionally drilled from an unorthodox surface location 1,340 feet from the North Line and 660 feet from the East Line of Section 11 to a bottom hole location 1,498 feet from the South Line and 683 feet from the East line.

The well plan consists of drilling a vertical hole to the KOP (kick off point) at 4,913' MD/TVD. The hole will be directional drilled utilizing a build rate of 12°/100' to penetrate the Cherry Canyon 4 Sand at 5,641' MD / 5,377' TVD at 90° of angle. The Cherry Canyon 4 will be intersected at 1,803' FNL and 660' FEL of Section 11 T25S R29E. The well will continue laterally (90°) for ±2000' of vertical displacement. The proposed BHL will be 1,498' FSL & 683' FWL of section 2. The top of the Delaware will be intersected at 3200' MD/TVD at 1,498' FSL and 683' FWL of Section 11. A drilling prognosis, directional plot, and proposed survey report are attached as Exhibit B.

Production casing will be run and cemented to TD. The Cherry Canyon 4 Sand will be selectively perforated, with all perforations being placed in accordance of a standard location of Section 11 T25S R29E (greater than 330' from any lease line).

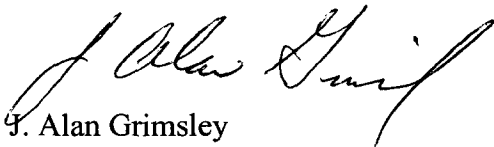
By placing the surface location at 1,340' FNL and 660' FWL of Section 11, the maximum amount of reservoir rock in the Cherry Canyon 4 Sand in the producing area can be penetrated and produced.

Furthermore, Southwestern Energy Production Company has gained 100% access to the mineral interests to the Cherry Canyon formation in the Delaware Mountain Group of Section 11 via farmout agreements with EOG (Lease Serial No. 3633-2) with the exception of the NE $\frac{1}{4}$ NE $\frac{1}{4}$ quarter section of Section 11 in which Southwestern Energy Production Co. shares interest (50/50) with OXY USA WTP L.P.. A land plat is attached as Exhibit C.

Your expedited approval of this unorthodox location is requested.

If you have any questions, I can be reached at 281-618-4068 or by email at alan_grimsley@swn.com.

Very truly yours,

A handwritten signature in black ink, appearing to read "J. Alan Grimsley". The signature is fluid and cursive, with the first name "J." and last name "Grimsley" clearly distinguishable.

J. Alan Grimsley
Southwestern Energy Production Co.

Attachments
CC: District 2

DISTRICT I
1626 N. FRENCH DR., HOBBES, NM 86240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 86210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
Property Code	Property Name KARLSBAD CORRAL 11	Well Number 4H
OGRID No.	Operator Name SOUTHWESTERN ENERGY PRODUCTION COMPANY	Elevation 3089'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	11	25-S	29-E		1340	NORTH	660	EAST	EDDY

Bottom Hole Location If Different From Surface

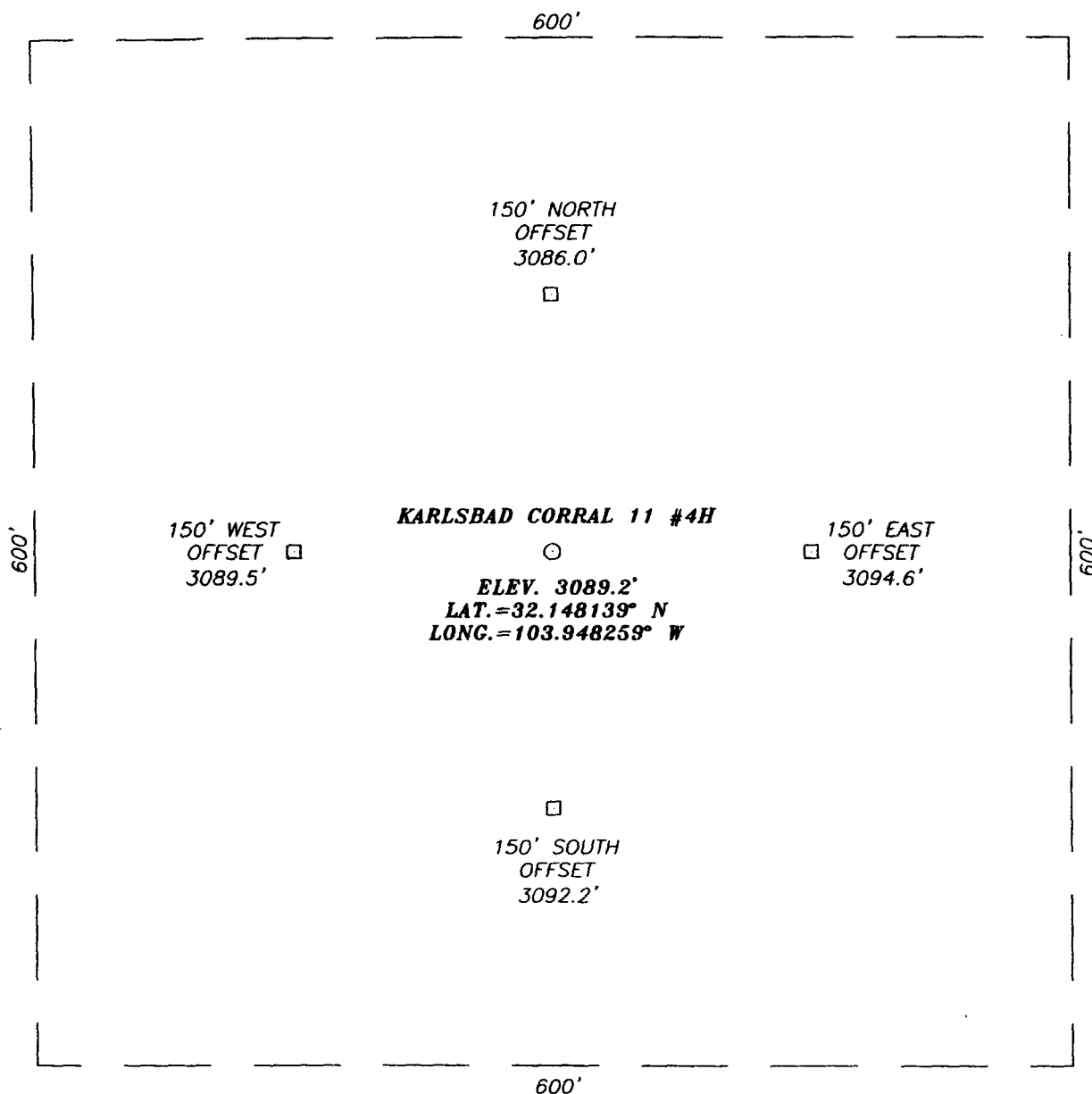
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	11	25-S	29-E		1498	SOUTH	683	EAST	EDDY

Dedicated Acres 80	Joint or Infill	Consolidation Code	Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

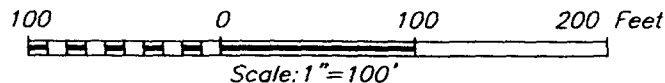
<p>GEODETIC COORDINATES NAD 27 NME Y=417827.5 N X=619178.9 E LAT.=32°08'53" N LONG.=103°56'54" W</p> <p>Project Area</p> <p>Producing Area</p> <p>BOTTOM HOLE Y=415350.1 N X=619178.9 E</p>	<p>1340'</p> <p>660'</p> <p>SL</p> <p>GRID AZ = 180°00'00"</p> <p>HORIZ. DIST = 2478.0'</p> <p>BH</p> <p>683'</p> <p>1498'</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>J. Alan Grimsley</i> 8/8/06 Signature Date J. ALAN GRIMSLEY Printed Name</p> <p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>JULY 25, 2006</p> <p>Date Surveyed REV:08/08/06 MR</p> <p>Signature & Seal of Professional Surveyor</p> <p><i>Ronald C. Eidson</i> 8/08/06 06.11.1263</p> <p>Certificate No. GARY EIDSON 12841 RONALD C. EIDSON 3239</p>
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SECTION 11, TOWNSHIP 25 SOUTH, RANGE 29 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

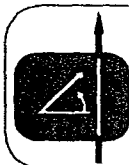
FROM THE INTERSECTION OF ST. HWY. #285 AND CO. RD. #725 (WHITEHORN RD.), GO EAST ON WHITEHORN APPROX. 4.0 MILES TO AN EL PASO PIPELINE R/W ROAD. TURN LEFT AND GO NORTHEAST APPROX. 6.6 MILES TO A CALICHE ROAD ON LEFT. TURN LEFT AND GO NORTH APPROX. 1.3 MILES. TO A CALICHE ROAD ON LEFT. TURN LEFT AND GO WEST APPROX. 1.0 MILE. VEER WEST AND GO APPROX. 0.8 MILES. TURN LEFT AND GO SOUTH APPROX. 0.9 MILES TO THE SANTA FE ENERGY CORRAL FLY 11 #1 EXISTING WELL. THIS LOCATION IS APPROX. 700 FEET SOUTH.



SOUTHWESTERN ENERGY PRODUCTION COMPANY

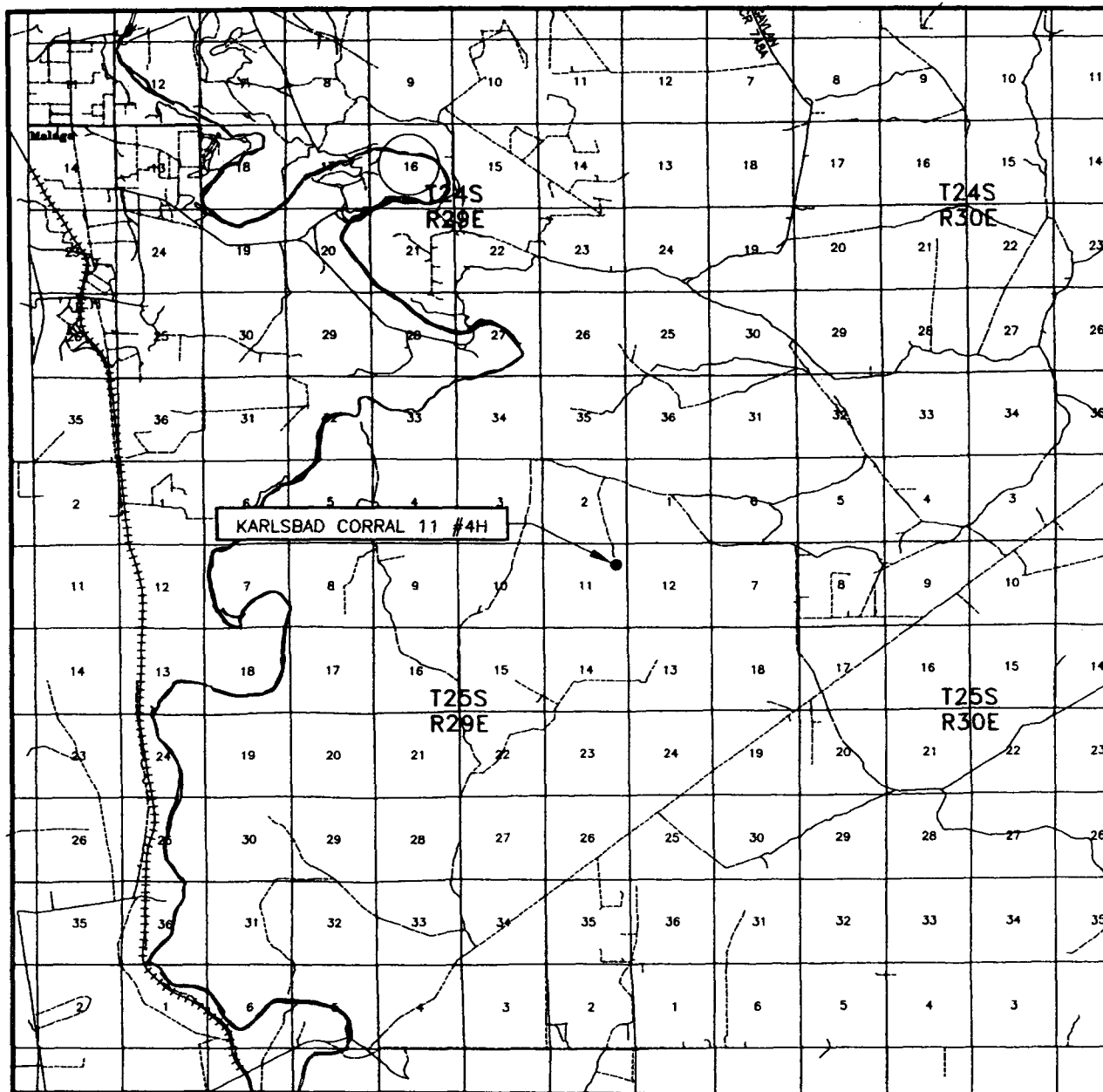
KARLSBAD CORRAL 11 #4H
 LOCATED 1340 FEET FROM THE NORTH LINE
 AND 660 FEET FROM THE EAST LINE OF SECTION 11,
 TOWNSHIP 25 SOUTH, RANGE 29 EAST, N.M.P.M.,
 EDDY COUNTY, NEW MEXICO.

Survey Date: 07/25/06	Sheet 1 of 1 Sheets
W.O. Number: 06.11.1263	Dr By: M.R.
Date: 07/26/06	Disk: CD#6
06111263	Scale: 1"=100'



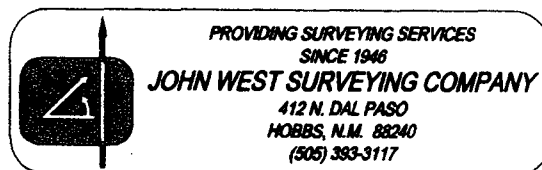
PROVIDING SURVEYING SERVICES
 SINCE 1946
JOHN WEST SURVEYING COMPANY
 412 N. DAL PASO
 HOBBS, N.M. 88240
 (505) 383-3117

VICINITY MAP

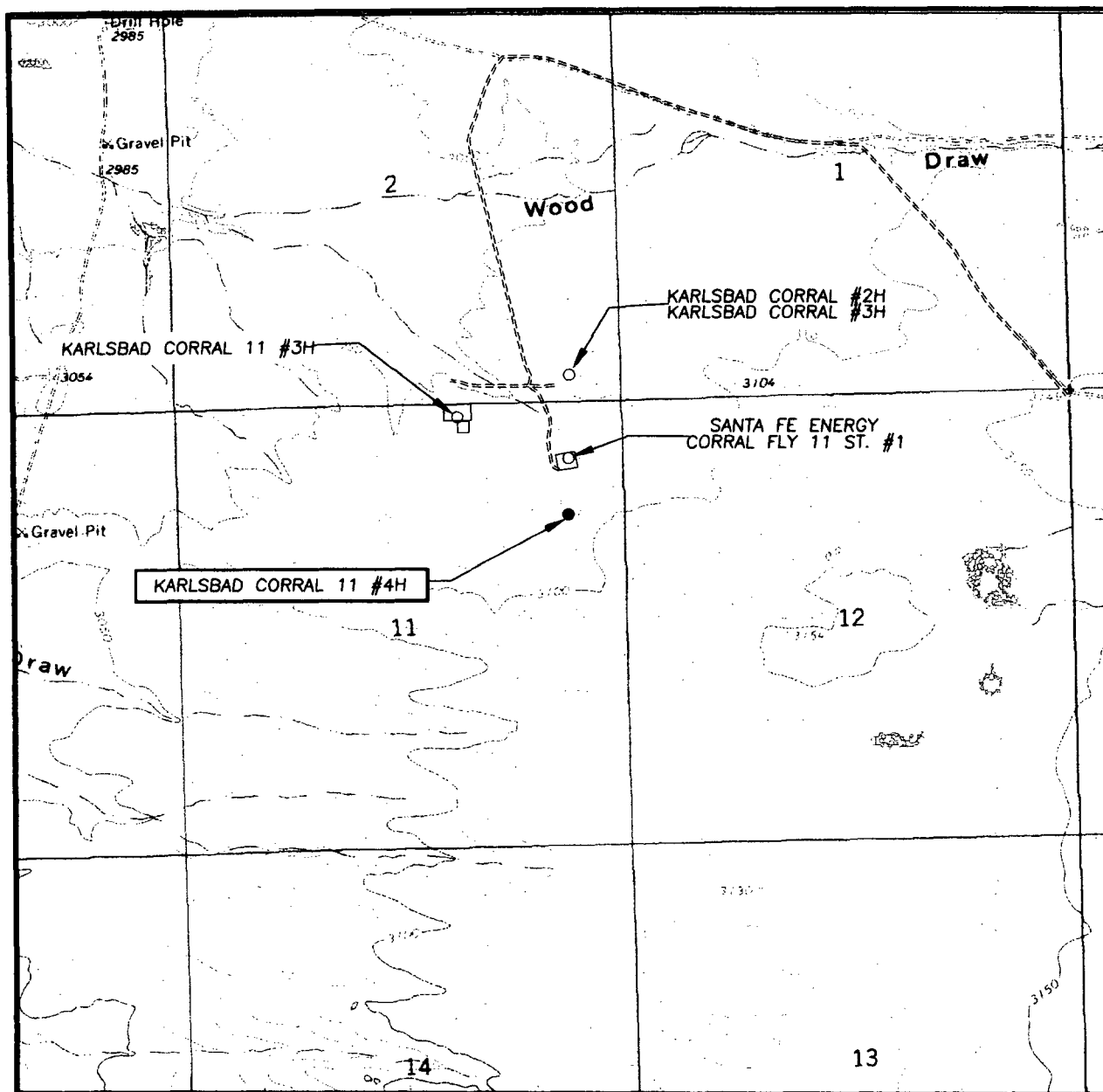


SCALE: 1" = 2 MILES

SEC. 11 TWP. 25-S RGE. 29-E
 SURVEY N.M.P.M.
 COUNTY EDDY STATE NEW MEXICO
 DESCRIPTION 1340' FNL & 660' FEL
 ELEVATION 3089'
 OPERATOR SOUTHWESTERN ENERGY
PRODUCTION COMPANY
 LEASE KARLSBAD CORRAL 11



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
PIERCE CANYON, N.M. - 10'

SEC. 11 TWP. 25-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

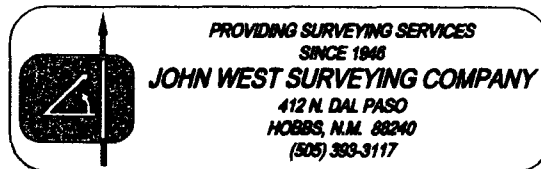
DESCRIPTION 1340' FNL & 660' FEL

ELEVATION 3089'

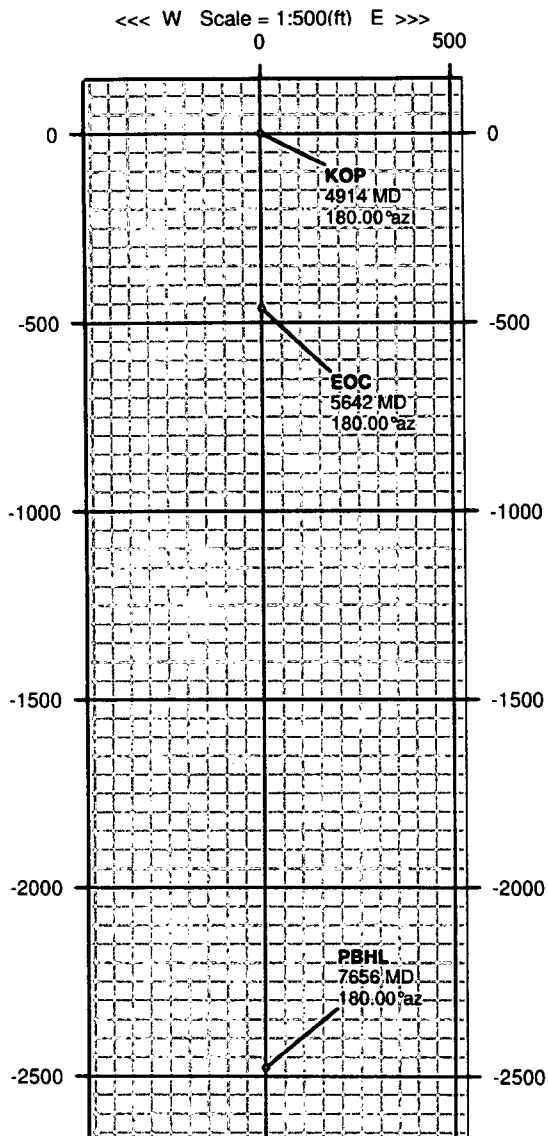
OPERATOR SOUTHWESTERN ENERGY
PRODUCTION COMPANY

LEASE KARLSBAD CORRAL 11

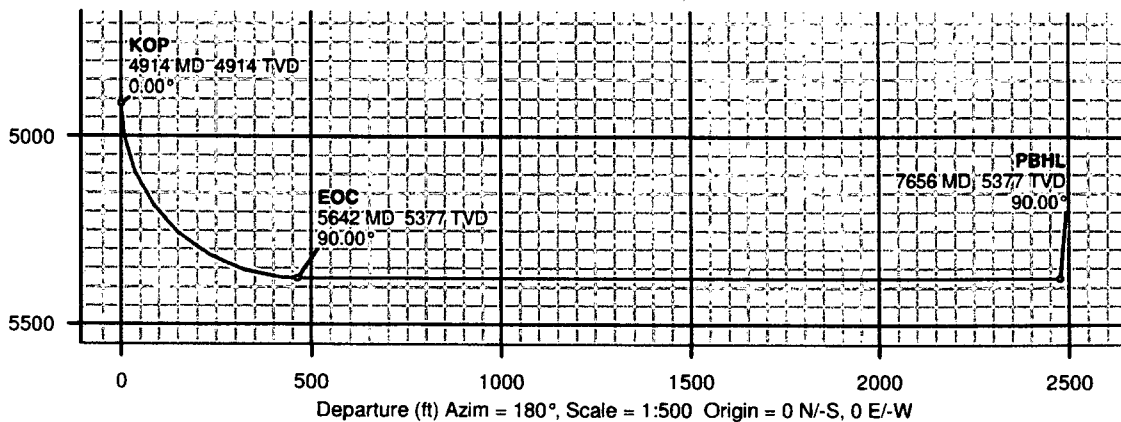
U.S.G.S. TOPOGRAPHIC MAP
PIERCE CANYON, N.M.



WELL Karlsbad Corral 11 #4H	FIELD Eddy County, NM	STRUCTURE Karlsbad Corral 11 #4H
<div style="display: flex; justify-content: space-between; font-size: 0.8em;"> <div> Magnetic Parameters Model: IGRF 2005 Dip: 60.173° Mag Dec: +8.319° </div> <div> Date: August 04, 2008 FB: 49058.7 nT </div> <div> Surface Location Lat: N32 8 53.299 Lon: W103 56 53.734 </div> <div> NAD27 New Mexico State Planes, Eastern Zone, US Feet Northing: 417627.50 BUS Easting: 619178.90 BUS Grid Conv: +0.20490390° Scale Fact: 0.9999253587 </div> <div> Miscellaneous Sht: Karlsbad Corral 11 #4H Plan: Karlsbad Corral 11 #4H v2 TVD Ref: RKB (0.00 ft above) Srvy Date: Wed 03:28 PM August 06, 2008 </div> </div>		



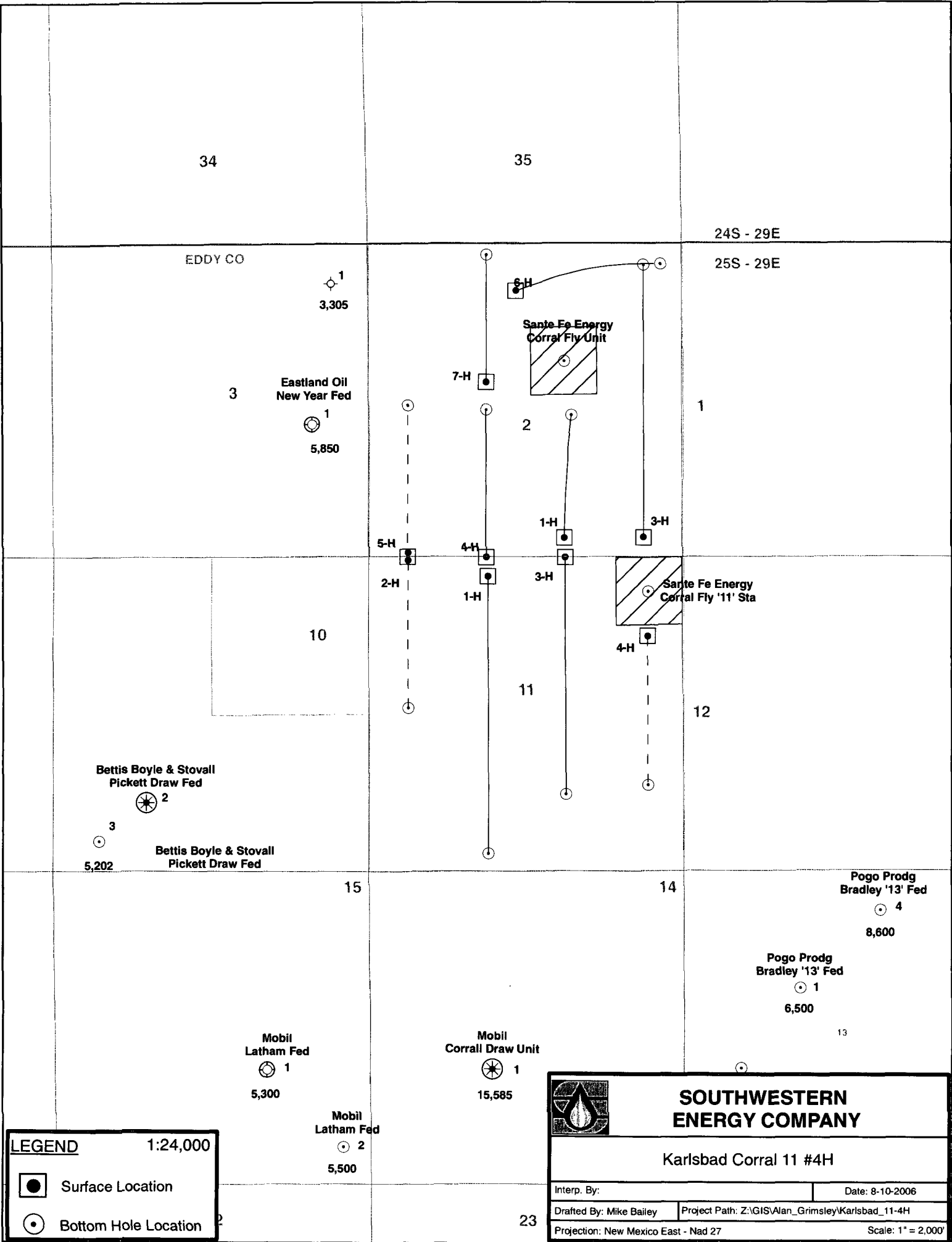
Critical Points								
Critical Point	MD	INCL	AZIM	TYD	YSEC	N(±)/S(±)	E(±)/W(±)	DLS
Tie-In	0.00	0.00	180.00	0.00	0.00	0.00	0.00	0.00
KOP	4913.50	0.00	180.00	4913.50	0.00	0.00	0.00	0.00
EOC	5641.67	90.00	180.00	5377.06	463.57	-463.57	0.00	12.36
PBHL	7655.56	90.00	180.00	5377.00	2477.46	-2477.46	0.00	0.00



Proposal

Report Date: August 9, 2006	Survey / DLS Computation Method: Minimum Curvature / Lubinski
Client:	Vertical Section Azimuth: 180.000°
Field: Eddy County, NM	Vertical Section Origin: N 0.000 ft, E 0.000 ft
Structure / Slot: Karlsbad Corral 11 #4H / Karlsbad Corral 11 #4H	TVD Reference Datum: RKB
Well: Karlsbad Corral 11 #4H	TVD Reference Elevation: 0.0 ft relative to
Borehole: Karlsbad Corral 11 #4H	Sea Bed / Ground Level Elevation: 0.000 ft relative to
UWI/API#:	Magnetic Declination: 8.319°
Survey Name / Date: Karlsbad Corral 11 #4H_r2 / August 9, 2006	Total Field Strength: 49056.677 nT
Tort / AHD / DDI / ERD ratio: 90.002° / 2477.46 ft / 5.502 / 0.461	Magnetic Dip: 60.172°
Grid Coordinate System: NAD27 New Mexico State Planes, Eastern Zone, US Feet	Declination Date: August 04, 2006
Location Lat/Long: N 32 8 53.299, W 103 56 53.734	Magnetic Declination Model: IGRF 2005
Location Grid N/E Y/X: N 417827.500 ftUS, E 619178.900 ftUS	North Reference: Grid North
Grid Convergence Angle: +0.20490390°	Total Corr Mag North -> Grid North: +8.114°
Grid Scale Factor: 0.99992536	Local Coordinates Referenced To: Well Head

Comments	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	NS (ft)	EW (ft)	Closure (ft)	Closure Azimuth (deg)	DLS (deg/100 ft)	Tool Face (deg)
Tie-In	0.00	0.00	180.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	180.00M
KOP	4913.50	0.00	180.00	4913.50	0.00	0.00	0.00	0.00	0.00	0.00	180.00M
	5000.00	10.69	180.00	4999.50	8.05	-8.05	0.00	8.05	180.00	12.36	0.00G
	5100.00	23.05	180.00	5095.01	37.01	-37.01	0.00	37.01	180.00	12.36	0.00G
	5200.00	35.41	180.00	5182.11	85.75	-85.75	0.00	85.75	180.00	12.36	0.00G
	5300.00	47.77	180.00	5256.75	152.01	-152.01	0.00	152.01	180.00	12.36	0.00G
	5400.00	60.13	180.00	5315.48	232.70	-232.70	0.00	232.70	180.00	12.36	0.00G
	5500.00	72.49	180.00	5355.58	324.10	-324.10	0.00	324.10	180.00	12.36	0.00G
	5600.00	84.85	180.00	5375.19	421.96	-421.96	0.00	421.96	180.00	12.36	0.00G
EOC	5641.67	90.00	180.00	5377.06	463.57	-463.57	0.00	463.57	180.00	12.36	0.00G
PBHL	7655.56	90.00	180.00	5377.00	2477.46	-2477.46	0.00	2477.46	180.00	0.00	0.00G





DRILLING PROGNOSIS
Southwestern Energy Production Company

WELL NAME: Karsilbad Corral Fly 11 #4-H

AFE NO.

LOCATION: Sec. 11, T25S, R29E
Eddy County NM
SL: 1340' FNL 660' FEL
BHL: 1498' FSL 683' FEL
TGT ENTRY PT: 1803' FNL 660' FEL
OBJECTIVE: Cherry Canyon Sd, CC-4

PROSPECT: Corral Fly

EST. ELEVATION: GL 3089'; RKB $\pm 16''$

