# PIPELINE QUALIFICATION RECORD

1. Pipeline
   Line Number: 38 MNT05-1
   Orig. Appro. #
   Line Name: Norteno #5
   Description of Location: El Paso Delivery Point near Anthony, Texas in El Paso County, Texas to end of line in Dona Ana County, New Mexico.

2. Design Code
   DOT Part 192
   Corrosion Allowance
   None

<table>
<thead>
<tr>
<th>Pipe Size</th>
<th>Eff. Wall Thickness</th>
<th>Grade</th>
<th>SMYS</th>
<th>Class Loc.</th>
<th>Design Factor</th>
<th>Max Design Press.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5&quot;</td>
<td>.156&quot;</td>
<td>Unknown</td>
<td>1,664</td>
<td>3</td>
<td>.5</td>
<td>832</td>
</tr>
<tr>
<td>3.5&quot;</td>
<td>.125&quot;</td>
<td>Unknown</td>
<td>1,714</td>
<td>3</td>
<td>.5</td>
<td>857</td>
</tr>
<tr>
<td>3.5&quot;</td>
<td>.125&quot;</td>
<td>Unknown</td>
<td>1,714</td>
<td>2</td>
<td>.6</td>
<td>1,029</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(24,000)</td>
</tr>
</tbody>
</table>

3. Components
   Valves: 150 # ANSI
   Fittings: 150 # ANSI
   Vessels: # ANSI
   Other: # ANSI

4. Construction
   Completed, month and year: 3" - 1954; 4" - 1967
   Type of weld inspection
   No. welds X-rayed: No. Repairs: % X-rayed

5. Pressure test
   Test Section: Entire Pipeline
   Date: 11/5/07
   Fluid: Gas
   Class: 2 & 3
   Test Pressure: 92 psig
   Duration: 1 Hours
   Failures: None

   Test Section
   Date
   Test Pressure: psig
   Duration: Hours
   Failures

   Test Section
   Date
   Test Pressure: psig
   Duration: Hours
   Failures

6. Qualification Data
   Max O. P. Pipe: 832 psig, Components: 275 psig, Test: 61 psig
   Max. actual press. (5 yrs. prior July 1, 1970): N/A
   MAX. ALLOW. OPER. PRESSURE (MAOP): 61 psig

---

C:\Documents and Settings\olea00678\My Documents\PQRs\pqr 38 MNT05-1 Norteno #5 4-16-08.doc
ONEOK GAS TRANSPORTATION, L.L.C.
REPORT OF PIPELINE PRESSURE TEST
(For Pipelines to Operate Above 60 PSIG)

Line Name: Norteno #5
Test Medium: Gas

Job Order Number:
Region: Permian

Location: Section _____ Twp. _____ Rge. _____ To: Section _____ Twp. _____ Rge. _____

Design Pressure: 832/837 PSIG
MAOP: 60 PSIG
OGT Pre-Test #: PT-0115

PIPE SPECIFICATIONS (Material to be tested)
Size: 4.50" Weight: 156" Grade: Unknown
Class Location: 3 Quantity: 2,165-feet
Pressure required to produce Hoop Stress of 100% SMYS: 1664
Pressure required to produce Hoop Stress of 90% SMYS: 1498

Size: 3.50" Weight: 125" Grade: Unknown
Class Location: 3 Quantity: 4,065-feet
Pressure required to produce Hoop Stress of 100% SMYS: 1714
Pressure required to produce Hoop Stress of 90% SMYS: 1543

Fittings:
Maximum ratings of flanges: ANSI 150
Maximum ratings of valves: PSIG 275

Maximum Elevation: N/A PSIG
Location: Section _____ Twp. _____ Rge. _____
Pressure: N/A % SMYS

Minimum Elevation: N/A PSIG
Location: Section _____ Twp. _____ Rge. _____
Pressure: N/A % SMYS

Location of Pumps: N/A
Initial Pressure: _____
Initial Temp.: _____
Final Pressure: _____
Final Temp.: _____

Location of Gauges/Charts: Section 91
Initial Pressure: 180°F
Initial Temp.: 120°F
Final Pressure: 92
Final Temp.: 125°F

Test: Started: 12/13/09 - 11/05/007 Ended: 11/14/09 - 11/05/007
(Time and Date)

Remarks: Gauges & charts were located at both ends of this pipe segment test.
Start: Latitude: North 38° 00.03; Longitude: West 106° 36.12; Elevation: 3703'
End: Latitude: North 31° 05.19; Longitude: West 106° 37.18; Elevation: 3775'

Name: Tim Smith
Title: Manager - Permian District

Date: 12-11-07
(Signature)

(Note: Consult O & M Procedure 412 for standard testing)
### Pressure Test Log

#### Report No. OKTAL/Worteno No. 5

<table>
<thead>
<tr>
<th>Deadweight</th>
<th>Time</th>
<th>Temp.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>11:45</td>
<td>116</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>12:00</td>
<td>118</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>12:15</td>
<td>123</td>
<td></td>
</tr>
<tr>
<td>91</td>
<td>12:30</td>
<td>122</td>
<td></td>
</tr>
<tr>
<td>92</td>
<td>12:45</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>92</td>
<td>1:00</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>92</td>
<td>1:15</td>
<td>118</td>
<td></td>
</tr>
<tr>
<td>92</td>
<td>1:30</td>
<td>123</td>
<td></td>
</tr>
<tr>
<td>92</td>
<td>1:45</td>
<td>126</td>
<td></td>
</tr>
</tbody>
</table>

**Comments on Testing, or Additional Pipe, Fitting, Valve, Flange, etc., Descriptions**
**Line Patrol Report**

**Line No:**

**Line Name:** Norteno #5 (Anthony)

**Date:** 8/27/2007

<table>
<thead>
<tr>
<th>Block</th>
<th>Section</th>
<th>Survey</th>
<th>League</th>
<th>Labor</th>
<th>County</th>
<th>State</th>
<th>Texas</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Type of Patrol: Leak Survey From EPNG Take-off to East Drain**

- **Aerial** [X]
- **Ground** [X]
- **Class 3 Locations** [X]
- **Hwy and RR Crossings** [ ]
- **Used Gas Detection Equipment** [X]
- **Serial #** 45189

**Type of gas detection equip. used:**
- **CGI** [X]
- **Flame Ionization** [ ]

**Class 3 GPS Start:**
- **Latitude:** 32 00.03 N
- **Longitude:** 106 36.12 W
- **Elevation:** 3603

**Class 3 GPS Finish:**
- **Latitude:** 32 00.00 N
- **Longitude:** 106 36.52 W
- **Elevation:** 3759

**Leaks Found:**
- **Yes** [ ]
- **No** [X]

**List leaks below:**

1. __________________________________________________________
2. __________________________________________________________
3. __________________________________________________________

**Line Condition**

- **Atmospheric Corrosion** [X]
- **New construction in area** [X]
- **Supports adequate** [X]
- **Pipeline Markers Adequate** [X]
- **C.P. Test station adequate** [X]
- **Fence conditions adequate** [X]
- **Paint Adequate** [X]
- **Possible hazards** [X]
- **Pipeline vents adequate** [X]
- **Insulating Sets Need Repair** [X]
- **Erosion/Sunken ditches** [X]
- **Possible leaks** [X]
- **Condition of Drips (N/A) Good** [ ]
- **Poor** [ ]

**Station #’s**

<table>
<thead>
<tr>
<th>Station #’s</th>
<th>Location (Blk, Sec, Survey)</th>
<th>Tracking #’s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Aerial Conditions:**

- **Weather conditions:**
- **Average altitude:**
- **Average speed:**

<table>
<thead>
<tr>
<th>Time of day at take off:</th>
<th>Time of day at landing:</th>
<th>Direction of flight:</th>
</tr>
</thead>
</table>

- **Dead vegetation along right-of-way** [ ]
- **Was right-of-way photographed?** [ ]
- **Dead vegetation at railroad/highway crossings** [ ]
- **Was right-of-way videotaped?** [ ]

**Changes in Population Density:**

- **Location:**
  - **Type Structure/Area**
    - [ ] House/Trailer
    - [ ] Single family
    - [ ] Business/apartments
    - [ ] Less than 20 persons
    - [ ] Other
    - [ ] 20 persons or more
  - **Estimated Occupancy**
  - **Explain other:**

<table>
<thead>
<tr>
<th>% Change</th>
<th>Type Structure/Area</th>
<th>Estimated Occupancy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>House/Trailer</td>
<td>Single family</td>
</tr>
<tr>
<td></td>
<td>Business/apartments</td>
<td>Less than 20 persons</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>20 persons or more</td>
</tr>
</tbody>
</table>

**Signature:** Tony Jacquez (TGS)
Line Patrol Report

Line No: ____________________ Line Name: Norteno #5 (Anthony) ____________ Date: 8/27/2007
Block ____________________ Section ______ Survey ____________________
League ____________________ Labor ______ County ____________________ State Texas ____________
Latitude ____________ Longitude ____________ Elevation ____________ Tracking # Norteno #5 - 8/20/07

Type of Patrol: Class 3 Patrol only from EPNG Take-off to East Drain
Aerial [ ] Ground [X] Class 3 Locations [X] Hwy and RR Crossings [ ] Used Gas Detection Equipment [ ]
Type of gas detections equip. used: CGI [ ] Flame Ionization [ ] Serial # ____________
Class 3 GPS Start: Latitude 32°00.03 N Longitude 106°36.12 W ____________
Class 3 GPS Finish: Latitude 32°00.00 N Longitude 106°36.52 W ____________
Leaks Found? Yes [X] No [ ] List leaks below:__

1). Station # ____________ Location (Blk, Sec, Survey) ____________ Tracking #’s ____________
2). ____________ ____________ ____________
3). ____________ ____________ ____________

Line Condition

| Yes | No |
|----------------------------------|
| Atmospheric Corrosion | New construction in area | Supports adequate | X | X |
| Pipeline Markers Adequate | C.P. Test station adequate | Fence conditions adequate | X | X |
| Paint Adequate | Possible hazards | Pipeline vents adequate | X | X |
| Insulating Sets Need Repair | Erosion/Sunken ditches | Possible leaks | X | X |
| Condition of Drips (N/A) Good | Poor | Meter # | ____________ |

Station #’s ____________

Aerial Conditions:

Weather conditions: ____________
Average altitude: ____________
Average speed: ____________

Time of day at take off: ____________ Time of day at landing: ____________ Direction of flight: ____________

Dead vegetation along right-of-way | Yes [X] No [ ] Was right-of-way photographed? | Yes [X] No [ ]
Dead vegetation at railroad/highway crossings | Yes [ ] No [X] Was right-of-way videotaped? | ____________

Changes in Population Density:

Location: ____________
Station Number ____________
Blk/Lea. ____________ Sec/Lab ____________
Survey ____________
Distance to line ____________

Type Structure/Area  Estimated Occupancy

<table>
<thead>
<tr>
<th>House/Trailer</th>
<th>Single family</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business/apartments</td>
<td>Less than 20 persons</td>
</tr>
<tr>
<td>Other</td>
<td>20 persons or more</td>
</tr>
</tbody>
</table>

Explain other: ____________

Signature: Oscar Phillips ____________
# Line Patrol Report

**Line No:** __________  
**Line Name:** Norteno #5 (Anthony)  
**Date:** 8/27/2007  
**Block:** __________  
**Section:** __________  
**Survey:** __________  
**League:** __________  
**Labor:** __________  
**County:** __________  
**State:** Texas  
**Latitude:** __________  
**Longitude:** __________  
**Elevation:** __________  
**Tracking #:** Norteno #5 8/13/07

## Type of Patrol: Leak Survey From East Drain to PNM Check Meter

- **Aerial** [ ] Ground [X]  
- **Type of gas detection equipment used:** CGI [X] Flame ionization [ ]  
- **used:** Used Gas Detection Equipment [X]  
- **Serial #** 45189  
- **Class 2 GPS Start:**  
  - **Latitude:** 32 00.00 N  
  - **Longitude:** 106 36.52 W  
  - **Elevation:** 3759  
- **Class 2 GPS Finish:**  
  - **Latitude:** 31 59.99 N  
  - **Longitude:** 106 37.18 W  
  - **Elevation:** 3775

**Leaks Found?** Yes [ ] No [X]  
**List leaks below:**  

1.  
2.  
3.  

**Tracking #**

### Line Condition

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes</th>
<th>No</th>
<th></th>
<th>Yes</th>
<th>No</th>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atmospheric Corrosion</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pipeline Markers Adequate</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paint Adequate</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insulating Sels Need Repair</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Condition of Drips (N/A) Good</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Erosion/Sunken ditches</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Station #**

**Aerial Conditions:**

**Weather conditions:**

**Average altitude:**

**Average speed:**

**Time of day at take off:**

**Time of day at landing:**

**Direction of flight:**

**Dead vegetation along right-of-way**

**Was right-of-way photographed?** Yes [ ] No [ ]

**Dead vegetation at railroad/highway crossings**

**Was right-of-way videotaped?** Yes [ ] No [ ]

### Changes in Population Density:

<table>
<thead>
<tr>
<th>Location</th>
<th>Type Structure/Area</th>
<th>Estimated Occupancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stn. Number</td>
<td>House/Trailer</td>
<td>Single family</td>
</tr>
<tr>
<td>Blk/Lea.</td>
<td>Business/apartments</td>
<td>Less than 20 persons</td>
</tr>
<tr>
<td>Sec/ Lab</td>
<td>Other</td>
<td>20 persons or more</td>
</tr>
</tbody>
</table>

**Distance to line:**

**Signature:** Tony Jacquez (TGS)
Line Patrol Report

Line No: __________________ Line Name: Norteno #5 (Anthony) Date: 8/27/2007

Block ____________ Section ____________ Survey ____________ Block ____________ Section ____________ State Texas

League ____________ Labor ____________ County ____________ League ____________ Labor ____________ Date: 8/27/2007

Latitude ____________ Longitude ____________ Elevation ____________ Tracking #: Norteno #5 8/20/07

Type of Patrol: Patrol only from East Drain to PNM Check Meter

Aerial [ ] Ground [x] Class 2 Locations [x] Hwy and RR Crossings [ ] Used Gas Detection Equipment [ ]

Type of gas detections equip. used: CGI [ ] Flame ionization [ ]

Serial #: 45189

Class 2 GPS Start: Latitude 32 00.00 N Longitude 106 38.52 W Elevation 3759

Class 2 GPS Finish: Latitude 31 59.99 N Longitude 108 37.18 W Elevation 3775

Leaks Found? Yes [ ] No [x] List leaks below:

Station # Location (Blk, Sec, Survey) Tracking #s

1. _______ _________ _________ _______

2. _______ _________ _________ _______

3. _______ _________ _________ _______

Line Condition

Atmospheric Corrosion [ ] No [x] New construction in area [ ] No [x] Supports adequate [x]

Pipeline Markets Adequate [x] - C.P. Test station adequate [x] - Fence conditions adequate [x]

Paint Adequate [ ] Possible hazards [x] - Pipeline vents adequate [x]

Insulating Sets Need Repair [x] - Erosion/Sunken ditches [x] - Possible leaks [ ]

Condition of Drips (N/A) Good [ ] Poor [x] Meter #

Station #s: 4" steel line on W. Washington that crosses east drain lateral is in good condition and is painted. 3" steel at 1st lateral east of PNM check meter has a gouge on the side. Most of line has polyken tape but should be sand blasted and painted whenever the water level permits

Aerial Conditions:

Weather conditions:

Average altitude:

Average speed:

Time of day at take off: ____________ Time of day at landing: ____________ Direction of flight: _______

Dead vegetation along right-of-way [ ] Yes [x] No _______ Was right-of-way photographed? [ ] Yes [ ] No

Dead vegetation at railroad/highway crossings [ ] Yes [ ] No _______ Was right-of-way videotaped? [ ] Yes [ ] No

Changes in Population Density:

Location: ____________

Station Number: ____________

Blk/Lea. ______ Sec/Lab _______

Survey _______

Distance to line _______

Type Structure/Area:

[ ] House/Trailer [ ] Single family

[ ] Business/apartments [ ] Less than 20 persons

[ ] Other [ ] 20 persons or more

Estimated Occupancy:

[ ] Explain other: ____________

Signature: Oscar Phillips


Pipeline Condition Report

ONEOK Co  OkTex Pipeline Company, L.L.C.  District  Permian

Line No:  Line Name: Norteno # 5  Date: 12/5/2006

Block  CAMUNDY  Section  247  Survey  W.D. Marsh

League  Labor  County  EL Paso  State  Texas

Latitude  N32.0.069  Longitude  W106.36.263  Elevation  2895 FT  Tracking #

TYPE OF CONSTRUCTION:

☐ Bare Steel  ☑ Coated Steel  ☑ Welded  ☐ Threaded  ☐ Dresser Coupled

Type of Coating: FBE  Coating Condition: ☑ Good adhesion  ☐ Loose  ☐ Disbonded

Remarks of Pipe Condition:

External:  ☑ Excellent  ☐ Good  ☐ Pitted  ☐ Poor  ☐ Other:

Internal:  ☐ Excellent  ☐ Good  ☐ Pitted  ☐ Poor  ☐ Other:

Corrosion Data:

Extent of Corrosion (Negligible, Slight, Medium, Severe):  N/A

Type of Corrosion (General or Pitting):  N/A

Location of Corrosion (Top, Bottom, Sides, All over):  N/A

Pitting Characteristics:

Deepest Pit  N/A  Mills  N/A  Mills  Wet or Dry  N/A

Average Depth  N/A  Mills  N/A  Mills  Hard or Soft  N/A

Widest Pit  N/A  Inches  N/A  Inches

Average Width  N/A  Inches

Length of Corroded Pipe  N/A  Feet

Pipe Scale:  External  Internal

Was there a leak at this Location?  ☐ No  ☑ Yes  If Yes, choose type of leak below:

☐ Corrosion (was Corrosion Department notified?)  ☑ Yes  ☐ No

☐ Damage by Outside Force  ☐ Third Party  ☐ Construction Defect  ☐ Material Failure

☐ Other: Pipeline Replacement in RR Casing Pictures 1 - 57

Bell Hole and Ultrasonic Tester:

Carrier Pipe Size:  4"  Grade: X-42  Wall Thickness: 0.188  Pipe Mfg:

Instrument: Make CYGNUS  Model 4  Serial Number 748

UT Readings:

0.185

0.19

Pipe to Soil Readings: -1.297

0.19

Soil pH: 360MV (4.8PH)

Soil Resistivity: 60 K ohms/cc

Depth of Cover: 54" E - 84" W Ft/inches

Remarks:

Dug each side of casing out at FM 1905 and Main St on SW Corner. On the west side casing was very deep. Used shoring equip.

Blew down line cut line with cold cutters. Inserted new 4" pipe that was pressured tested to 98 psi for 4 hours above ground.

Jeeped coating repaired jeeps with Tape Coat M50RC with Primer. Installed plastic casing spacers 5 feet apart on 4" pipe. (PAGE 2)

Completed By:  Mark Willis  Date: 12/7/2006

Revised 5/7/02  KJG
Coat M50 RC with Primer. Tied-in on east side and west side of RR Tracks. Had B&H Welder tie-in on east side and TGS Welder Paul tie-in on west side due to close quarters. After tying in new pipe to old pipe, I checked for shortened casing. All was clear. The line was purged and pressured back up to specs. The field welds were soapied to check for leaks in welds. The field welds were taped with Tape Coat M50 RC with Primer. The area was backfilled and wacker packed on the east and west sides to TXDOT's standards. We poured 2 sack concrete in the asphalt area. Asphalt will be repaired by Seal Rite in the following weeks. The area to 2 sack and asphalt is 2' x 13' x 1' deep. All paper work and pictures have been filed.
### CATHODIC PROTECTION LINE SURVEY - NORTENO LINE # 5

<table>
<thead>
<tr>
<th>Inspection Date</th>
<th>T.S. #</th>
<th>OkTex P/S</th>
<th>Foreign P/S</th>
<th>(Amps returning to OkTex)</th>
<th>Casing P/S</th>
<th>Remarks</th>
<th>Checked by</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/28/2007</td>
<td>1</td>
<td>1.072</td>
<td></td>
<td></td>
<td></td>
<td>Reg. Station @ 4th &amp; Washington (downstream)</td>
<td>O. Phillips</td>
</tr>
<tr>
<td>8/28/2007</td>
<td>2*</td>
<td>Delete</td>
<td>(Same as # 1)</td>
<td></td>
<td></td>
<td>Reg. Station @ 4th &amp; Washington (upstream)</td>
<td>O. Phillips</td>
</tr>
<tr>
<td>8/28/2007</td>
<td>3</td>
<td>1.243</td>
<td></td>
<td></td>
<td></td>
<td>Drainage canal west of Main on Washington (exposed)</td>
<td>O. Phillips</td>
</tr>
<tr>
<td>8/28/2007</td>
<td>5</td>
<td>1.285</td>
<td></td>
<td></td>
<td></td>
<td>Terminal box @ pole west of RR tracks on Washington</td>
<td>O. Phillips</td>
</tr>
<tr>
<td>8/28/2007</td>
<td>6</td>
<td></td>
<td></td>
<td>0.336</td>
<td>Casing west of RR Tracks</td>
<td>O. Phillips</td>
<td></td>
</tr>
<tr>
<td>8/28/2007</td>
<td>7</td>
<td></td>
<td></td>
<td>0.222</td>
<td>Casing east of RR Tracks</td>
<td>O. Phillips</td>
<td></td>
</tr>
</tbody>
</table>

* T.S. # indicates the inspection station number.