

FORM
2A

Rev
08/13

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

400649474

0

Date Received:

02/26/2015

Oil and Gas Location Assessment

☐ New Location ☐ Refile ☒ Amend Existing Location Location#: 311970

Submit signed original form. This Oil and Gas Location Assessment is to be submitted to the COGCC for approval prior to any ground disturbance activity associated with oil and gas operations. Approval of this Oil and Gas Location Assessment will allow for the construction of the below specified Location; however, it does not supersede any land use rules applied by the local land use authority. Please see the COGCC website at <http://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

311970

Expiration Date:

03/30/2018

☒ This location assessment is included as part of a permit application.

CONSULTATION

- ☐ This location is included in a Comprehensive Drilling Plan. CDP # _____
- ☒ This location is in a sensitive wildlife habitat area.
- ☐ This location is in a wildlife restricted surface occupancy area.
- ☐ This location includes a Rule 306.d.(1)A.ii. variance request.

Operator

Operator Number: 26625
Name: ELM RIDGE EXPLORATION COMPANY LLC
Address: 12225 GREENVILLE AVE STE 950
City: DALLAS State: TX Zip: 75243-9362

Contact Information

Name: Terry Lindeman
Phone: (505) 632-3476
Fax: (505) 632-8151
email: tlindeman@elmridge.net

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20100130 ☐ Gas Facility Surety ID: _____
☐ Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: IGE Number: 132
County: LA PLATA
QuarterQuarter: SWNW Section: 11 Township: 33N Range: 8W Meridian: N Ground Elevation: 6706
Define a single point as a location reference for the facility location. When the location is to be used as a well site then the point shall be a well location.
Footage at surface: 1458 feet FNL from North or South section line
1090 feet FWL from East or West section line
Latitude: 37.121830 Longitude: -107.691840
PDOP Reading: 1.9 Date of Measurement: 07/10/2007
Instrument Operator's Name: Scott Weibe

RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

This proposed Oil and Gas Location is:

LOCATION ID # FORM 2A DOC #

FACILITIES

Indicate the number of each type of oil and gas facility planned on location

Wells	<u>2</u>	Oil Tanks*	<u> </u>	Condensate Tanks*	<u> </u>	Water Tanks*	<u>2</u>	Buried Produced Water Vaults*	<u> </u>
Drilling Pits	<u> </u>	Production Pits*	<u> </u>	Special Purpose Pits	<u> </u>	Multi-Well Pits*	<u> </u>	Modular Large Volume Tanks	<u> </u>
Pump Jacks	<u>2</u>	Separators*	<u>2</u>	Injection Pumps*	<u> </u>	Cavity Pumps*	<u> </u>	Gas Compressors*	<u> </u>
Gas or Diesel Motors*	<u>3</u>	Electric Motors	<u> </u>	Electric Generators*	<u> </u>	Fuel Tanks*	<u>3</u>	LACT Unit*	<u> </u>
Dehydrator Units*	<u> </u>	Vapor Recovery Unit*	<u> </u>	VOC Combustor*	<u> </u>	Flare*	<u> </u>	Pigging Station*	<u> </u>

OTHER FACILITIES*

Other Facility Type

Number

valve can	<u>1</u>
Meter run	<u>2</u>
Meter House	<u>2</u>

Those facilities indicated by an asterisk () shall be used to determine the distance from the Production Facility to the nearest cultural feature on the Cultural Setbacks Tab.

Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

4" gas pipeline will be constructed from wellhead to meter and separator which will tie to the main flowline at the South end of well pad. All pipeline work will be done on the existing location and pipeline will be buried a minimum of 36 inches. See facility layout diagram for additional details.

CONSTRUCTION

Date planned to commence construction: 05/01/2015 Size of disturbed area during construction in acres: 3.43

Estimated date that interim reclamation will begin: 09/01/2015 Size of location after interim reclamation in acres: 1.26

Estimated post-construction ground elevation: 6706

DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes

Is H₂S anticipated? No

Will salt sections be encountered during drilling: No

Will salt based mud (>15,000 ppm Cl) be used? No

Will oil based drilling fluids be used? No

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE

Drilling Fluids Disposal Method: Commercial Disposal

Cutting Disposal: OFFSITE

Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

See attached Waste Management Plan

Beneficial reuse or land application plan submitted?

Reuse Facility ID: or Document Number:

Centralized E&P Waste Management Facility ID, if applicable:

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Don L. Gosney

Phone: 970-884-9533

Address: P.O. box 256

Fax:

Address:

Email: mattb@gosneyco.com

City: Bayfield State: CO Zip: 81122

Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian

Check all that apply. The Surface Owner: ☐ is the mineral owner

☐ is committed to an oil and Gas Lease

☐ has signed the Oil and Gas Lease

☐ is the applicant

The Mineral Owner beneath this Oil and Gas Location is: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Minerals beneath this Oil and Gas Location will be developed from or produced to this Oil and Gas Location: No

The right to construct this Oil and Gas Location is granted by: Surface Use Agreement

Surface damage assurance if no agreement is in place: Surface Surety ID:

Date of Rule 306 surface owner consultation 12/11/2007

CURRENT AND FUTURE LAND USE

Current Land Use (Check all that apply):

Crop Land: ☐ Irrigated ☐ Dry land ☐ Improved Pasture ☐ Hay Meadow ☐ CRP

Non-Crop Land: ☒ Rangeland ☐ Timber ☐ Recreational ☐ Other (describe):

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

Future Land Use (Check all that apply):

Crop Land: ☐ Irrigated ☐ Dry land ☐ Improved Pasture ☐ Hay Meadow ☐ CRP

Non-Crop Land: ☒ Rangeland ☐ Timber ☐ Recreational ☐ Other (describe):

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

CULTURAL DISTANCE INFORMATION

Provide the distance to the nearest cultural feature as measured from Wells or Production Facilities onsite.

	From WELL	From PRODUCTION FACILITY
Building:	2347 Feet	2170 Feet
Building Unit:	2347 Feet	2170 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	850 Feet	800 Feet
Above Ground Utility:	2347 Feet	2347 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	215 Feet	295 Feet

INSTRUCTIONS:

- All measurements shall be provided from center of nearest Well or edge of nearest Production Facility to nearest of each cultural feature as described in Rule 303.b.(3)A.
- Enter 5280 for distance greater than 1 mile.
- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.
- Building Unit, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in 100-Series Rules.
- For measurement purposes only, Production Facilities should only include those items with an asterisk(*) on the Facilities Tab.

DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a: ☐ Buffer Zone
☐ Exception Zone
☐ Urban Mitigation Area

- Buffer Zone - as described in Rule 604.a.(2), within 1,000' of a Building Unit.
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.
- Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: _____

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: _____

FOR MULTI-WELL PADS AND PRODUCTION FACILITIES WITHIN DESIGNATED SETBACK LOCATIONS ONLY:

- ☐ Check this box if this Oil and Gas Location has or will have Production Facilities that serve multiple wells (onll or offsite) and the Production Facilities are proposed to be located less than 1,000 feet from a Building Unit. *(Pursuant to Rule 604.c.(2)E.i., the operator must evaluate alternative locations for the Production Facilities that are farther from the Building Unit, and determine whether those alternative locations were technically feasible and economically practicable for the same proposed development.)*
- ☐ By checking this box, I certify that no alternative placements for the Production Facilities, farther from the nearest Building Unit, were available based on the analysis conducted pursuant to Rule 604.c.(2)E.i.

In the space below, explain rationale for siting the multi-well Production Facility(ies) that supports your Rule 604.c.(2)E.i determination. Attach documentation that supports your determination to this Form 2A.

SOIL

List all soil map units that occur within the proposed location. attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" report listing the soil typical vertical profile. This data is to be used when segregating topsoil.

The required information can be obtained from the NRCS web site at <http://soildatamart.nrcs.usda.org/> or from the COGCC web site GIS Online map page found at <http://colorado.gov/cogcc>. Instructions are provided within the COGCC web site help section.

NRCS Map Unit Name: 63—Sili clay loam, 3 to 6 percent slopes

NRCS Map Unit Name: _____

NRCS Map Unit Name: _____

PLANT COMMUNITY:

Complete this section only if any portion of the disturbed area of the location's current land use is on non-crop land.

Are noxious weeds present: Yes ☐ No ☒

Plant species from: ☒ NRCS or, ☐ field observation Date of observation: _____

List individual species: indian ricegrass, juegrass, western wheatgrass big sagebrush, pinyon, Rock Mountain Juniper

Check all plant communities that exist in the disturbed area.

- ☒ Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)
- ☐ Native Grassland (Bluestem, Grama, Wheatgrass, Buffalograss, Fescue, Oatgrass, Brome)
- ☐ Shrub Land (Mahogany, Oak, Sage, Serviceberry, Chokecherry)
- ☐ Plains Riparian (Cottonwood, Willow, Aspen, Maple, Poplar, Russian Olive, Tamarisk)
- ☐ Mountain Riparian (Cottonwood, Willow, Blue Spruce)
- ☐ Forest Land (Spruce, Fir, Ponderosa Pine, Lodgepole Pine, Juniper, Pinyon, Aspen)
- ☐ Wetlands Aquatic (Bullrush, Sedge, Cattail, Arrowhead)
- ☐ Alpine (above timberline)
- ☐ Other (describe): _____

WATER RESOURCES

Is this a sensitive area: ☒ No ☐ Yes

Distance to nearest

downgradient surface water feature: 1250 Feet

water well: 1830 Feet

Estimated depth to ground water at Oil and Gas Location 31 Feet

Basis for depth to groundwater and sensitive area determination:

There are no water wells within 1000' of the edges of the disturbed area for this location. A seasonal irrigation ditch lies approximately 940' from the NWC of the existing disturbed area of this location.

31.6' estimated depth to groundwater was derived from averaging the static water table depths for the wells above. These are the closest producing wells with static water table information available to the proposed IGE 132 well location. Please see attached Hydrology Maps.

Well Permit # 14826-SE/4NE/4 Sec. 10 T33N, R8W NMPM-Static Water Level 12'
Well Permit # 206293-NE/4NE/4 Sec. 11 T33N, R8W NMPM-Static Water Level 14'
Well Permit # 2262897-NE/4NW/4 Sec. 10 T33N, R8W NMPM-Static Water Level 45'
Well Permit # 148648-SW/4SE/4 Sec. 8 T33N, R8W NMPM-Static Water Level 22"
Well Permit #25348-NW/4SE/4 Sec. 8 T33N, R8W NMPM-Static Water Level 65"

Is the location in a riparian area: ☒ No ☐ Yes

Was an Army Corps of Engineers Section 404 permit filed ☒ No ☐ Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer _____ No _____
zone:

If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified: No

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 608

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)

- ☐ Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- ☐ Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- ☐ Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- ☐ Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

RULE 502.b VARIANCE REQUEST

- ☐ Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number _____

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

OPERATOR COMMENTS AND SUBMITTAL

Comments	<p>Please copy me on all correspondence with Operator.</p> <p>A Stormwater plan is being prepared by Ecosphere Environmental Services for this location. No construction layout drawing is attached due to this not being in a Buffer Zone or Exception Zone.</p> <p>Per Rule 303.b.(3).G.bb., Elm Ridge will provide four color photographs of the reference area during growing season within 12 months of the approval of Form 2A</p>
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I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: _____ Date: 02/26/2015 Email: jl@animas.net

Print Name: Robert D. Joyce Title: Agent

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved:  Director of COGCC Date: 3/31/2015

Conditions Of Approval

All representations, stipulations and conditions of approval stated in this Form 2A for this location shall constitute representations, stipulations and conditions of approval for any and all subsequent operations on the location unless this Form 2A is modified by Sundry Notice, Form 4 or an Amended Form 2A.

COA Type	Description
	Operator shall pressure test pipelines in accordance with Rule 1101.e.(1) prior to putting into initial service any temporary surface or permanent buried pipelines and following any reconfiguration of the pipeline network.
	<p>The moisture content of any cuttings in a cuttings pit, trench, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts.</p> <p>If the well is to be hydraulically stimulated, flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline or storage vessel located on the well pad; or into tanker trucks for offsite disposal. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment must be placed on the well pad in an area constructed to be sufficiently impervious to contain any spilled or released material.</p> <p>Potential odors associated with the completions process and/or with long term production operations must be controlled/mitigated as to not impact nearby residences.</p>
	<p>Operator must ensure secondary containment for any volume of fluids contained at well site during drilling and completion operations; including, but not limited to, construction of a berm or diversion dike, diversion/collection trenches within and/or outside of berms/dikes, site grading, or other comparable measures (i.e., best management practices (BMPs) associated with stormwater management) sufficiently protective of nearby surface water. Any berm constructed at the well pad location will be stabilized, inspected at regular intervals (at least every 14 days per CDPHE requirements and after significant precipitation events), and maintained in good condition.</p> <p>The access road will be maintained as to not allow any sediment to migrate from the access road to nearby surface water or any drainages leading to surface water.</p> <p>Strategically apply fugitive dust control measures, including enforcing established speed limits on private roads, to reduce fugitive dust and coating of vegetation and deposition in water sources.</p> <p>Berms or other containment devices shall be constructed to be sufficiently impervious (corrugated steel with poly liner) to contain any spilled or released material around permanent crude oil, condensate, and produced water storage tanks.</p>
	Notify the COGCC 48 hours prior to start of pad reconstruction/regrading (if necessary), rig mobilization, spud, pipeline testing, start of hydraulic stimulation operations, and start of flowback operations (if different than start of hydraulic stimulation operations) using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).

Best Management Practices

No	BMP/COA Type	Description
1	Community Outreach and Notification	Rule 604.a (2)-there are no buildings or building units within 1000' of location.
2	Pre-Construction	Rule 604.c.(2)W-Pre-construction consultation occurred at the time the Surface Damage Agreement was negotiated. In subsequent conversations with, Matt Barnett, agent for Don L. Gosney, the surface owner. No changes were requested and none are anticipated.
3	Traffic control	Rule 604.c.(2)D-From the intersection of State Hwy 172 & County Road 318 in Ignacio, Colorado, travel west on County Road 318 for 5.2 miles; Go right (North) on County Road 311 for 2.0 miles; Go right (East) on County Road 311 for 1.0 miles; Go right (South) for 0.8 miles; Go left (East) for 0.5 miles; Go right (South) for 0.3 miles; Go left (East) for 0.2 miles; Go left (East) for 0.2 miles; Go left (North) for 0.6 miles; Go right (North) well access for 0.1 miles to staked well location on existing IGE 107 well pad. Access is granted by Surface Damage Agreement Agreement. Elm Ridge agrees to comply with any La Plata County traffic control measures required for this well.
4	General Housekeeping	Rule 604.c.(2)P- Trash containers will be maintained on site. Trash will be hauled to and disposed at a commercial landfill.

5	Storm Water/Erosion Control	Wattles will be placed, where necessary, around the perimeter of the site prior to, or at the beginning of construction. The size and quantity of the wattles used will vary according to the location to insure adequate protection of drainage areas.
6	Material Handling and Spill Prevention	Rule 604.c.(2)F- Wells are monitored daily by the pumpers. Pressure monitoring is not necessary. Maximum reservoir pressure is approximately 1200 psig. These are low pressure gathering lines. All gathering lines are checked yearly for leaks. Per Rule 604.c.(2)G.- Berms will be constructed with corrugated metal sides and will be sufficient in height and area to contain 150% of the volume of the largest single tank. Synthetic liners are being and will be used under tanks on location. Rule 604.c.(2)N-Any materials not in use that might constitute a fire hazard will be removed a minimum distance of twenty five feet from the wellhead, tanks and separator. No electrical equipment installations are planned inside the bermed area.
7	Construction	Rule 604.c.(2)V.- the IGE 132 well will be located in the immediate vicinity of and partially within the footprint of the existing IGE 107 well pad. Rule 604.c.(2)B.- no fresh water pits are planned. Rule 604.c.(2)E- The existing well access road will be used. No new disturbance is anticipated. Standard specifications for this access road include a driving surface constructed with with 6 inches of 3" minus gravel over a driving surface approximately 12 feet in width, crowned, with ditches and culverts where necessary for drainage. Rule 604.c.(2)M.- The tract of land where the well pad is located is not a designated setback location. Rule 604.c.(2)V-The existing well pad for the Elm Ridge IGE 108 well is being used for this location. 8 Noise mitigation (Rule 604.c.(2)A Drilling and Completion
8	Noise mitigation	(Rule 604.c.(2)A Drilling and Completion: Noise levels will be monitored by operator and if exceeds acceptable levels operator agrees to install sound walls or, if necessary, provide reasonable motel accommodations for the affected party. Post-production: No necessity for engines or motorized equipment is anticipated. If such equipment becomes necessary, Elm Ridge will first try to electrify the location if it is practical and feasible. If not, they will orient exhaust away from the affected party and will use hospital grade mufflers, buried, in series. Elm Ridge will install sound walls if necessary
9	Drilling/Completion Operations	Rule 604.c.(2)B.- A closed loop system will be used. No fresh water pits are planned. Fresh water will be stored in above ground tanks Per Rule 604.c.(2)C.)-i.- There are producing wells within one mile of the location of the proposed IGE 132 well. It is anticipated that this will be a producing well and, if so, Elm Ridge will comply with applicable requirements under Rule 805. ii- No uncontrolled venting is anticipated (based on 500 mcf) iii-aa., bb. cc.- Elm Ridge will use a system capable of handling 1.5 Mmcf. Anticipated flowback is 0.5 Mmcf or less. No necessity for flaring is anticipated. Rule 604.c.(2)H.- Elm Ridge will be using a 3M system per BLM specifications. Rule 604.c.(2)I.- BOPE pressure testing will be performed weekly. 604.c.(2)K.- Pit level indicators will be used. 604.c.(2)L- Drill stem tests are not typically done and none are anticipated. Rule 604.c.(2)O- Load lines will be bullplugged Rule 604.c.(2)Q- Guy line anchors will be identified per COGCC rules and are tested before each use. Rule 604.c.(2)S. – Existing well access road will be used and maintained for all weather use and will meet any safety requirements.

Total: 9 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2107327	CORRESPONDENCE
2519726	OTHER
400649474	FORM 2A SUBMITTED
400800613	ACCESS ROAD MAP
400800614	NRCS MAP UNIT DESC
400800615	FACILITY LAYOUT DRAWING
400800616	WASTE MANAGEMENT PLAN
400800617	HYDROLOGY MAP B, TOPO
400800618	HYDROLOGY MAP A, TOPO
400800619	LOCATION DRAWING
400800620	LOCATION PICTURES
400800623	REFERENCE AREA MAP
400800624	MULTI-WELL PLAN
400800626	SURFACE AGRMT/SURETY

Total Attach: 14 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	3/30/2015 4:05:57 PM
OGLA	Initiated/Completed OGLA Form 2A review on 03-20-15 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, flowback to tanks only, cuttings low moisture content, notification, sediment and dust control, odor control, and pipeline testing COAs from operator on 03-06-15; received acknowledgement of COAs from operator on 03-27-15; corrected distances from WELL to Building from 2477' to 2347' (same as Building Unit) and from PRODUCTION FACILITIES to Building from 2270' to 2170' (same as Building Unit); passed by CPW on 03-20-15 with no recommended wildlife BMPs and use of existing pad acceptable; passed OGLA Form 2A review on 03-27-15 by Dave Kubeczko; fluid containment, spill/release BMPs, flowback to tanks only, cuttings low moisture content, notification, sediment and dust control, odor control, and pipeline testing COAs.	3/20/2015 3:55:20 PM
DOW	Operator pre-consulted with CPW on this well location. Due to the density of existing wells in this area, the Operators use of an existing pad for the new well, and the Operators proposed practices at this location, CPW does not have significant wildlife concerns with this application.	3/20/2015 8:52:32 AM
Permit	The structures on the aerial are abandoned and uninhabitable. This is what was once the homestead of the Flint family (owners of Flint construction Co., an oilfield service company in this area). Don Gosney now owns this property. Attaching some pics taken out there and in looking at them, noticed that there appeared to still be utilities available in the immediate area. Operator contacted La Plata Electric CO-OP and discussed this with the engineering department. They stated that the closest utility service that would be available is on Trilobyte Trail, appx 0.44 miles (2323.2 feet) from the well location. Pictures attached as doc#:2519726	3/9/2015 1:29:04 PM
Permit	Requested operator to clarify the nature of the building 184' east of the well.	3/4/2015 6:26:22 AM
Permit	Passed Completeness	3/3/2015 2:40:20 PM
Permit	Return to Draft: 1. Reference area pictures need to be provided or a comment added saying they will be provided at a later date for this well.	3/2/2015 9:52:32 AM

Total: 7 comment(s)