

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:

400711396

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Date Received:

10/20/2014

Oil and Gas Location Assessment

☐ New Location ☐ Refile ☒ Amend Existing Location Location#: 312997

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:

312997

Expiration Date:

12/26/2017

☒ 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: 10525
Name: SANTA FE NATURAL RESOURCES INC
Address: 4833 FRONT STREET UNIT B 506
City: CASTLE ROCK State: CO Zip: 80104

Contact Information

Name: Joe Mazitti
Phone: (720) 226-5791
Fax: ()
email: ogp-co@comcast.net

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20140076 ☐ Gas Facility Surety ID: _____
☐ Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: McIntyre Number: 1-3R
County: MOFFAT
QuarterQuarter: NESE Section: 3 Township: 7N Range: 94W Meridian: 6 Ground Elevation: 6632
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: 2195 feet FSL from North or South section line
427 feet FEL from East or West section line
Latitude: 40.585596 Longitude: -107.925312
PDOP Reading: 1.8 Date of Measurement: 09/18/2014
Instrument Operator's Name: Leo Hiltner

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>4</u>	Condensate Tanks*	<u> </u>	Water Tanks*	<u>1</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>1</u>	Separators*	<u>1</u>	Injection Pumps*	<u> </u>	Cavity Pumps*	<u> </u>	Gas Compressors*	<u> </u>
Gas or Diesel Motors*	<u> </u>	Electric Motors	<u> </u>	Electric Generators*	<u> </u>	Fuel Tanks*	<u> </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

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:

Flowline from wellhead to separator will be 3" steel; oil and produced water flowlines from separator to oil tanks and the produced water tank will be 3" steel. Based on production testing, offsite produced water and gas flowlines/pipelines might need to be installed to tie in to existing lines to the north.

CONSTRUCTION

Date planned to commence construction: 01/05/2015 Size of disturbed area during construction in acres: 3.80
Estimated date that interim reclamation will begin: 05/16/2015 Size of location after interim reclamation in acres: 2.70
Estimated post-construction ground elevation: 6629

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? Yes

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:

Drilling fluids will be transported via truck to the Dalbo disposal facility in Vernal Utah.
Drill cutting disposal will be to a commercial facility.

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: or Document Number:

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

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Sam McIntrye

Phone: _____

Address: 61075 U.S. Hwy 40

Fax: _____

Address: _____

Email: _____

City: Maybell State: CO Zip: 81640

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: Yes

The right to construct this Oil and Gas Location is granted by: oil and gas lease

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

Date of Rule 306 surface owner consultation 09/16/2014

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:	5280 Feet	5280 Feet
Building Unit:	5280 Feet	5280 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	5280 Feet	5280 Feet
Above Ground Utility:	5280 Feet	5280 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	454 Feet	574 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: 10. Battlement fine sandy loam 0-3% slopes.

NRCS Map Unit Name: 89. Grieves loamy fine sand, 12-25% slopes.

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: BLUEBUNCH WHEATGRASS, BOTTLEBRUSH SQUIRRELTAIL, SANDBERG BLUEGRASS, TRUCKEE RABBITBRUSH, NEEDLEANDTHREAD, WYOMING BIG SAGEBRUSH, ANTELOPE BITTERBRUSH, INDIAN RICE GRASS, WESTERN WHEATGRASS

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: 170 Feet

water well: 5182 Feet

Estimated depth to ground water at Oil and Gas Location 300 Feet

Basis for depth to groundwater and sensitive area determination:

Water well permit number 149577, SWNE, Sec. 11, 7N-94W

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: _____

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

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

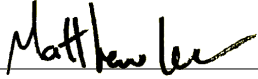
Comments A water/bentonite-based drilling mud will be used from surface (0') to approximately 9000'. A diesel mist drilling mud will be used from 9000' to the proposed total depth of 10,600'.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: _____ Date: 10/20/2014 Email: ogp-co@comcast.net

Print Name: Joe Mazitti 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: 12/27/2014

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
	<p>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>
	<p>A closed loop system must be implemented during drilling; or, if a drilling pit is constructed, an amended Form 2A must be submitted and a Form 15 submitted if operator plans on using either oil based muds or high chloride/TDS mud. The pit must be lined. All cuttings generated during drilling with oil based muds or high chloride/TDS mud must be kept in the lined drilling pit, or placed either in containers, lined trenches, or on a lined/bermed portion of the well pad; prior to disposition. The moisture content of any drill cuttings in a cuttings trench or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. At the time of closure, if the drill cuttings are to be left onsite, they must also meet the applicable standards of table 910-1. All liners associated with oil based muds or high chloride/TDS mud cuttings must be disposed of offsite per CDPHE rules and regulations.</p> <p>The moisture content of water-based drilling mud drill cuttings managed onsite shall be kept as low as practicable to prevent accumulation of liquids greater than de minimis amounts.</p> <p>If the well(s) is(are) 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.</p>
	<p>Operator must ensure secondary containment for any volume of fluids contained at tank site during 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 and after 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 encouraging established speed limits on private roads, to reduce fugitive dust and coating of vegetation and deposition in water sources.</p> <p>The location is in an area of moderate run-on/run-off potential; therefore standard stormwater BMPs must be implemented at this location to insure compliance with CDPHE and COGCC requirements and to prevent any stormwater run-on and /or stormwater run-off.</p>
	<p>Notify the COGCC 48 hours prior to start of pad reconstruction/regarding, rig mobilization, spud, pipeline testing, start of hydraulic stimulation operations, and start of flowback operations (if different than hydraulic stimulation operations) using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).</p>

Best Management Practices

No	BMP/COA Type	Description
1	General Housekeeping	Sewage will be handled in self-contained, chemical-treated portable toilets and contents hauled off location to an authorized Colorado Department of Public Health and Environment (CDPHE) approved sanitary disposal facility in accordance with state and local regulations. • Garbage and other burnable waste will be contained in a portable trash cage that will be totally enclosed with small mesh wire. Cage and contents will be transported to and trash dumped at a CDPHE-approved Sanitary Landfill upon completion of operations.
2	Wildlife	<p>CPW BMP 1 - Operator shall keep the road construction to a minimum and use existing roads to the extent possible, as requested by the surface owner.</p> <p>CPW BMP 2 - Operator shall conduct oil and gas construction, drilling and completions activities outside the time period from March 1 and June 30 (greater sage grouse production time).</p> <p>CPW BMP 3 - Operator shall conduct non-emergency post construction, drilling and completions activities between 9:00 AM and 3:00 PM between the period of March 1 and June 30 (greater sage grouse production time).</p> <p>CPW BMP 6 - Operator shall use hospital grade mufflers for compressors, pump jacks, or other motors necessary to run operations at the pad site. Mufflers will be pointed upwards to eliminate potential vibration to the ground.</p> <p>CPW BMP 7 – Operator shall consult with CPW and surface owner to evaluate seed mix reclamation options, CPW can assist the surface owner with developing a grass, forbs, and shrub wildlife friendly seed mix for reclamation.</p> <p>CPW BMP 8 - Operator shall establish and implement company guidelines to minimize wildlife mortality from vehicle collisions on roads: CPW recommended self enforcement of speed limits on private roads and limit speed to 25 MPH to minimize vehicle-wildlife collisions.</p> <p>CPW BMP 9 - Operator shall implement policies that prohibit employees and contractors from carrying or having firearms on site on in their vehicles.</p>
3	Storm Water/Erosion Control	A CDPS permit has been filed with the Colorado Department of Public Health and Environment (CDPHE). Storm Water Management Plans (SWMP) is in place to comply with both CDPHE and Colorado Oil and Gas Conservation Commission Rules and Regulations. Best Management Practices (BMP) to be installed during initial construction. Note that BMPs may be removed, altered, or replaced with changing conditions in the field and the SWMP will be updated accordingly.
4	Material Handling and Spill Prevention	Spill Prevention Control & Countermeasure Plans (SPCC) are in place to address material releases and to prescribe materials handling BMPs for the facility. "Good house-keeping" measures will be taken to ensure proper waste disposal.

Total: 4 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2107233	NRCS MAP UNIT DESC
2107235	HYDROLOGY MAP
2107247	WELL LOCATION PLAT
2107248	EXCEPTION LOCATION REQUEST
2107249	MULTI-WELL PLAN
2107250	REFERENCE AREA PICTURES
2107251	LOCATION PICTURES
2107252	SURFACE USE AGREEMENT DOCUMENTS
2107253	SURFACE OWNER WAIVERS FOR CPW CONSULT AND BMPs
2107256	CORRESPONDENCE
2107257	CORRESPONDENCE
2167912	CONST. LAYOUT DRAWINGS
2167913	CONST. LAYOUT DRAWINGS
400711396	FORM 2A SUBMITTED
400712480	LOCATION DRAWING
400712490	REFERENCE AREA MAP
400712495	CONST. LAYOUT DRAWINGS
400712508	ACCESS ROAD MAP

Total Attach: 18 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	No LGD or public comments. Final Review--passed.	12/26/2014 1:10:17 PM
OGLA	Initiated/Completed OGLA Form 2A review on 12-22-14 by Dave Kubeczko; requested a multi-well plan and acknowledgement of fluid containment, spill/release BMPs, flowback to tanks only, cuttings containment/management, cuttings low moisture content, notification, odor control, access road sediment control, dust control, and pipeline testing COAs from operator on 12-22-14; received acknowledgement of COAs from operator on 12-26-14; conducted CPW/COGCC/operator/surface owner onsite on 11-04-14; passed by CPW on 11-26-14 with recommended timing (grouse and big game) limitations and other wildlife BMPs acceptable; operator submitted surface owner waivers indicating that no CPW consultation recommendations or wildlife BMPs be placed on the Form 2A; operator has agreed to grouse timing limitations, hospital grade mufflers, seed mix consult, speed limits, no firearms BMPs on 12-26-14; passed OGLA Form 2A review on 12-26-14 by Dave Kubeczko; fluid containment, spill/release BMPs, flowback to tanks only, cuttings containment/management, cuttings low moisture content, notification, odor control, access road sediment control, dust control, and pipeline testing COAs.	12/22/2014 2:16:52 PM
Permit	Corrected Consultation & Contact page to reflect that this form is to amend an existing location and the corresponding number. Ready to pass pending OGLA approval.	12/1/2014 1:03:21 PM

DOW	<p>CPW conducted a site visit to this well pad location on November 4, 2014. The following are BMPs recommended at the site visit.</p> <p>CPW supported the surface owners desire to keep the road construction to a minimum and to use existing roads.</p> <p>CPW recommended that Santa Fe conduct oil and gas construction, drilling and completions activities outside the time period from March 1 and June 30 (greater sage-grouse production time).</p> <p>CPW recommended that post construction, drilling and completions activities be scheduled and carried out between 9:00 AM and 3:00 PM between the period of March 1 and June 30 (greater sage-grouse production time).</p> <p>CPW recommended that Santa Fe conduct oil and gas construction, drilling and completions activities outside the time period from December 1 and April 15 (mule deer critical winter range time and elk winter concentration time).</p> <p>CPW recommended that post construction, drilling and completions activities be scheduled and carried out between 9:00 AM and 3:00 PM between the period from December 1 and April 15 (mule deer critical winter range time and elk winter concentration time).</p> <p>Santa Fe agrees to use hospital grade mufflers for compressors, pump jacks, or other motors necessary to run operations at the pad site.</p> <p>Mufflers will be pointed upwards to eliminate potential vibration to the ground.</p> <p>CPW offered to assist the surface owner with developing a grass, forb, and shrub wildlife friendly seed mix for reclamation. Santa Fe and the surface owner were agreeable.</p> <p>CPW recommended that Santa Fe establish and implement company guidelines to minimize wildlife mortality from vehicle collisions on roads: CPW recommended self enforcement of speed limits on private roads and limit speed to</p> <p>25 MPH to minimize vehicle - wildlife collisions.</p> <p>CPW recommended that Santa Fe implement policies that prohibit employees and contractors from carrying or having firearms on site or in their vehicles.</p> <p>CPW recommended that Santa Fe implement a policy that prohibit employees and contractors from having pets on site or in their vehicle while at work.</p> <p>CPW reiterated that Santa Fe needed to adhere to COGCC Rule 1204 a. 1. requiring the operator to use bear proof dumpsters and or trash receptacles.</p>	11/26/2014 9:28:40 AM
Permit	Checked box for Surface Owner committed to a lease as per opr.	11/26/2014 9:14:55 AM
Permit	Location is not a legal location as per spacing order. Surface and minerals section appears incomplete. The form 2 is lacking information as well. Opr notified by email of issues.	11/20/2014 8:58:47 AM
Permit	Passed Completeness	10/22/2014 11:55:34 AM

Total: 7 comment(s)